MK Diamond Products, Inc.

www.mkdiamond.com

MK-770 EXP TILE SAW
OWNERS MANUAL & OPERATING INSTRUCTIONS

Revision 201	11.2008

Caution: Read all safety and operating instructions before using this equipment. This parts list **MUST** accompany the equipment at all times.

MK Diamond Products, Inc.

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SAFETY INSTRUCTIONS FOR THE MK-770 EXP TILE SAW

Congratulations on your purchase of a MK-770 EXP Tile Saw. We are certain that you will be pleased with your purchase. MK Diamond takes pride in producing the finest construction power tools and diamond blades in the industry.

Operated correctly, your MK-770 EXP should provide you with years of service. In order to help you, we have included this manual. This owners manual contains information necessary to operate and maintain your MK-770 EXP safely and correctly. Please take a few minutes to familiarize yourself with the MK-770 EXP by reading and reviewing this manual.

If you should have questions concerning your MK-770 EXP, please feel free to call our friendly customer service department at: 800 421-5830

Regards,

MK Diamond

SAFETY

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SAFETY

Read and follow all safety, operating and maintenance instructions. Failure to read and follow these instructions could result in injury or death to you or others. Failure to read and follow these instructions could also result in damage and/or reduced equipment life.

SAFETY MESSAGES:

A safety message alerts you to potential hazards that could hurt you or others. Each safety message is preceded by a safety alert symbol (⚠) and one of three words: **DANGER, WARNING,** or **CAUTION.**

⚠ DANGER

You **WILL** be **KILLED** or **SERIOUSLY INJURED** if you do not follow directions.

⚠ WARNING

You **CAN** be **KILLED** or **SERIOUSLY INJURED** if you do not follow directions.

⚠ CAUTION

You **CAN** be **INJURED** if you do not follow directions. It may also be used to alert against unsafe practices.

DAMAGE PREVENTION AND INFORMATION MESSAGES:

A Damage Prevention Message is to inform the user of important information and/or instructions that could lead to equipment or other property damage if not followed. Information Messages convey information that pertains to the equipment being used. Each message will be preceded by the word NOTE, as in the example below.

NOTE: Equipment and/or property damage may result if these instructions are not followed.

GENERAL SAFETY PRECAUTIONS AND HAZARD SYMBOLS:

In order to prevent injury, the following safety precautions and symbols should be followed at all times!

Safety Precautions:

ALWAYS read this Owner's Manual before operating the machine.

ALWAYS keep the Blade Guards in place.

⚠ REMOVE ADJUSTING KEYS AND WRENCHES

Form a habit of checking to see that keys and adjusting wrenches are removed from the power tool before it is turned on.

⚠ KEEP WORK AREA CLEAN

Cluttered work areas and benches invite accidents.

⚠ DO NOT USE IN DANGEROUS PLACES

DO NOT use power tools in damp or wet locations nor expose them to rain. Always keep the work area well lighted.

⚠ KEEP CHILDREN AWAY

All visitors and children should be kept a safe distance from work area.

MAKE THE WORKSHOP KID PROOF
Make the workshops kid proof by using padlocks, master switches or by removing starter keys.

DO NOT FORCE THE TOOL
A power tool will do a job better and safer operating at the rate for which it was designed.

USE THE RIGHT TOOL
DO NOT force a tool or an attachment, to do a job that it was not designed to do.

USE THE PROPER EXTENTION CORD
If using an extension cord make sure it is in good condition first. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage that will result in a loss of power and overheating. TABLE 1, Page 9 shows the correct AWG size to use depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gage. The smaller the gage number, the heavier the cord.

USE PROPER APPAREL
DO NOT wear loose clothing, gloves, neckties, rings, bracelets, or other jewelry that may be caught in moving parts. Non-slip footwear is recommended. Wear protective hair covering to contain long hair.

ALWAYS wear approved eye protection.

ALWAYS wear approved respiratory protection.

SECURE WORK
Clamps or a vise should be used to hold work whenever practical. Keeping your hands free to operate a power tool is safer.

DO NOT OVERREACH
Keep proper footing and balance at all times by not overreaching.

MAINTAIN TOOLS WITH CARE
Keep tools clean for the best and safest performance. Always follow maintenance instructions for lubricating, and when changing accessories.

DISCONNECT TOOLS
Power tools should always be disconnected before servicing or when changing accessories, such as blades, bits, cutters, and the like.

ALWAYS place the power ON/OFF switch in the **OFF** position when the saw is not in use.

SAFETY

USE RECOMMENDED ACCESSORIES
Consult the owner's manual for recommended accessories. Using improper accessories may increase the risk of personal or by-stander injury.

NEVER STAND ON THE TOOL
Serious injury could occur if a power tool is tipped, or if a cutting tool is unintentionally contacted.

CHECK FOR DAMAGED PARTS
Before using a power tool, check for damaged parts. A guard or any other part that is damaged should be carefully checked to determine it would operate properly and perform its intended function. Always check moving parts for proper alignment or binding. Check for broken parts and mountings and all other conditions that may affect the operation of the power tool. A guard, or any damaged part, should be properly repaired or replaced.

DIRECTION OF FEED
ALWAYS feed work into a blade or cutter against the direction of rotation. A blade or cutter should always be installed such that rotation is in the direction of the arrow imprinted on the side of the blade or cutter.

NEVER LEAVE A TOOL UNATTENDED
TURN POWER OFF - Do not leave a tool until it comes to a complete stop. Always turn a power tool OFF when leaving the work area, or, when a cut is finished.

CALIFORNIA PROPOSITION 65 MESSAGE:

WARNING
Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contain chemicals known [to the State of California] to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- Lead, from lead-based paints
- Crystalline silica, from bricks and cement and other masonry products and
- Arsenic and chromium, from chemically treated lumber

For further information, consult the following sources:

http://www.osha.gov/SLTC/silicacrystalline/index.html
http://www.oehha.org/prop65/out_of_date/6022kLstA.html

Your risk from these exposures varies depending on how often you do this type of work. To reduce your exposure to these chemicals, work in a well-ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

Hazard Symbols:

ELECTRICAL SHOCK

NEVER touch electrical wires or components while the engine is running. They can be sources of electrical shock which could cause severe injury or burns.

ROTATING PARTS

Keep hands, feet, hair, and clothing away from all moving parts to prevent injury. Never operate the engine with covers, shrouds, or guards removed.

OVER SPEED

NEVER tamper with the governor components or settings to increase the maximum speed. Severe personal injury and damage to the engine or equipment can result if operated at speeds above maximum.

DO NOT EXPOSE TO RAIN

DO NOT expose to rain or use in damp locations.

WARNING

Sawing and drilling generates dust. Excessive airborne particles may cause irritation to eyes, skin and respiratory tract. To avoid breathing impairment, always employ dust controls and protection suitable to the material being sawed or drilled; See OSHA (29 CFR Part 1910.1200). Diamond Blades improperly used are dangerous. Comply with American National Standards Institute Safety Code, B7.1 and, Occupational Safety and Health Act covering Speed, Safety Guards, Flanges, Mounting Procedures, General Operating Rules, Handling, Storage and General Machine Conditions

SAFETY

ELECTRICAL REQUIREMENTS AND GROUNDING INSTRUCTIONS:

In order to prevent potential electrical shock and injury, the following electrical safety precautions and symbols should be followed at all times!

WARNING

In case of a malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This tool is equipped with an electric cord having an equipment-grounding conductor and a grounding plug. The plug must be plugged into a matching outlet that is properly installed and grounded in accordance with all local codes and ordinances.

- Do not modify the plug provided – if it will not fit the outlet; have the proper outlet installed by a qualified electrician
- Improper connections of the equipment-grounding conductor can result in a risk of electric shock. The equipment-grounding conductor is the insulated conductor that has an outer surface that is green, with or without yellow stripes. If repair or replacement of the electric cord or plug is necessary, do not connect the equipment-grounding conductor to a live terminal
- Check with a qualified electrician or service personnel if the grounding instructions are not completely understood, or if in doubt as to whether the tool is properly grounded
- Use only 3-wire extension cords that have 3-prong grounding plugs and 3-pole receptacles that accept the tool's plug
- Repair or replace a damaged or worn cord immediately

WARNING

This tool is intended for use on a circuit that has an outlet that looks like the one shown in Sketch A of Figure 1. The tool has a grounding plug that looks like the plug illustrated in Sketch A of FIGURE 1. A temporary adapter, which looks like the adapter illustrated in sketches B and C, may be used to connect this plug to a 2-pole receptacle as shown in Sketch B, if a properly grounded outlet is not available. The temporary adapter should be used only until a properly grounded outlet can be installed by a qualified electrician. The green-colored rigid ear, lug, and the like, extending from the adapter, must be connected to a permanent ground such as a properly grounded outlet box.

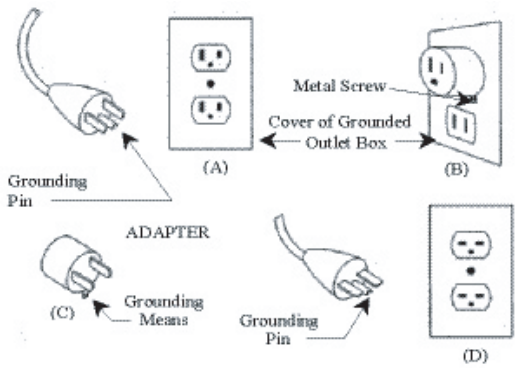


FIGURE 1

NOTE: Use of a temporary adapter is not permitted in Canada

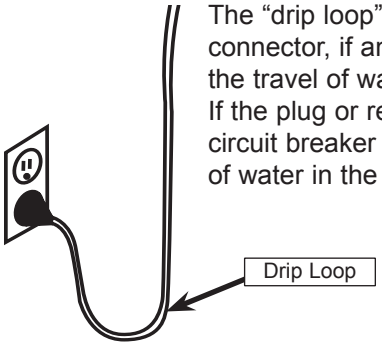
WARNING

To reduce the risk of electrocution, keep all connections dry and off the ground.

A Ground Fault Circuit Interrupter (GFCI) should be provided on the circuit(s) or outlet(s) to be used for the Saw. Receptacles are available having built-in GFCI protections and may be used for this measure of safety.

When using an extension cord, the GFCI should be installed closest to the power source, followed by the extension cord and lastly, the saw.

To avoid the possibility of the appliance plug or receptacle getting wet, position the saw to one side of a wall mounted receptacle. This will prevent water from dripping onto the receptacle or plug. A "drip loop," shown in FIGURE 2, should be arranged by the user to properly position the power cord relative to the power source.



The "drip loop" is that part of the cord below the level of the receptacle, or the connector, if an extension cord is used. This method of positioning the cord prevents the travel of water along the power cord and coming in contact with the receptacle. If the plug or receptacle gets wet, DO NOT unplug the cord. Disconnect the fuse or circuit breaker that supplies power to the tool. Then unplug and examine for presence of water in the receptacle.

FIGURE 2

⚠ WARNING

Use only extensions cords that are intended for outdoor use. These extension cords are identified by a marking "Acceptable for use with outdoor appliances; store indoors while not in use." Use only extension cords having an electrical rating not less than the rating of the product. Do not use damaged extension cords. Examine extension cords before using and replace if damaged. Do not abuse extension cords and do not yank on any cord to disconnect. Keep cords away from heat and sharp edges. Always disconnect the extension cord from the receptacle before disconnection the product form the extension cord.

⚠ WARNING

To reduce the risk of electrocution, keep all connections dry and off the ground. Do not touch the plug with wet hands.

⚠ WARNING

Use of under size extension cords result in low voltage to the motor that can result in motor burnout and premature failure. MK Diamond warns that equipment returned to us showing signs of being run in a low voltage condition, through the use of undersized extension cords will be repaired or replaced totally at the customers expense. There will be no warranty claim.

To choose the proper extension cord,

- Locate the length of extension cord needed in TABLE 1 below.
- Once the proper length is found, move down the column to obtain the correct AWG size required for that length of extension cord.

Extension Cord Minimum Gage for Length				
Volts	Total Length of Cord in Feet			
120 V	25 ft.	50 ft.	100 ft.	150 ft.
	AWG	AWG	AWG	AWG
	14	12	Not Recommended	

TABLE 1

SAFETY

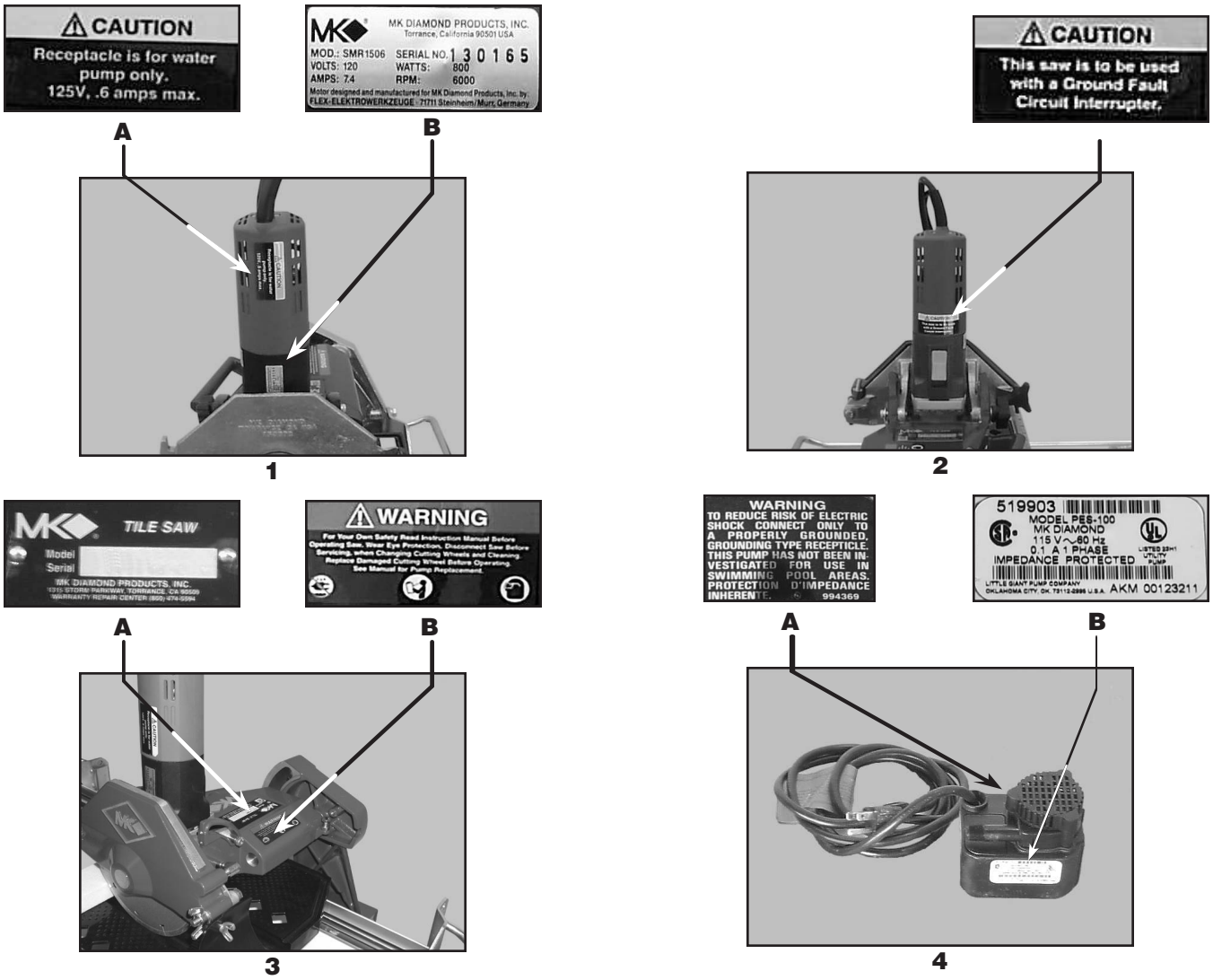
TILE SAW SPECIFIC WARNINGS:

WARNING Wear eye protection.
Use splash hood for every operation for which it can be used.
Disconnect saw before servicing, when changing cutting blades, and cleaning.
Replace damaged cutting blade before operating.

SAFETY LABEL LOCATIONS

Safety labels are located according to Figures 1 through 4 below. The labels contain important safety information. Please read the information contained on each safety label. These labels are considered a permanent part of your saw. If a label comes off or becomes hard to read, contact MK Diamond or your dealer for a replacement

Item	Location	Description	Part No.
1A	**Motor – Right Side**	**Caution – Receptacle is for Water Pump Only**	**154822**
1B	**Motor – Right Side**	**Motor Specifications**	**156428**
2	**Motor – Left Side**	**Caution–UsewithGroundFaultCircuitInterrupter**	**155678**
3A	**Cutting Head – Top**	**MK-770 EXP Serial Number**	**157249-4**
3B	**Cutting Head – Top**	**Warning – Read Owners Manual**	**155806**
4A	**Pump – Left Side**	**Warning – Connect to Grounded Receptacle**	**N/A**
4B	**Pump – Right Side**	**Pump Specifications**	**N/A**



PRODUCT SPECIFICATIONS

The MK-770 EXP is a versatile Tile Saw. Operated and used according to this manual, the MK-770 EXP will provide years of dependable service.

General Description

The MK-770 EXP Tile Saw is engineered as a tabletop or stand mounted wet tile saw. The saw includes a powerful 115V electric motor. The saw is capable of cutting tile up to twenty (20) inches in length. The saw can cut an object one and one-half (1-1/2) inches thick in one pass.

Motor Specifications

Motor specifications for the MK-770 EXP are listed in Table 2 below.

Voltage	**115V**
Overall Amperage	**7.4 A**
Frequency	**60Hz**
RPM	**6000 rpm**
Horse Power	**1-1/4 hp**

Table 2

Blade Capacity:

The MK-770 EXP uses a 7 (7) inch (178mm) diameter, wet cutting continuous rim, MK Diamond blade with a five-eighths (5/8) inch (15.875 mm) arbor.

Tile Types:

The MK-770 EXP can cut a variety of tile types including Porcelain, Terra-cotta, Marble, Quarry and Slate, Ceramic or almost any other non-ferrous material.

NOTE: The MK-770 EXP is not designed to cut plastic or ferrous (metals) material.

UNPACKING, TRANSPORT, UNIVERSAL STAND and ASSEMBLY

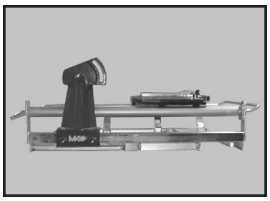
UNPACKING

CAUTION Use proper lifting techniques when lifting the MK-770 EXP

If not done, remove the MK-770 EXP, accessory box from the carton.

CONTENTS

In your container, you will find
One (1) MK-770 EXP frame and water pan
One (1) MK-770 EXP cutting head
One (1) cutting head height adjusting knob
One (1) height adjusting knob flat washer
One (1) Table Clip
One (1) 7-inch wet cutting Hot Dog® blade
One (1) adjustable cutting guide
One (1) electric water pump
One (1) pump discharge fitting
One (1) cooling transfer tube
One (1) flow adjusting clamp
One (1) drain plug
One (1) blade wrench
One (1) inner flange wrench
One (1) splash guard
One (1) owners manual
One (1) pump manual and
One (1) warranty card

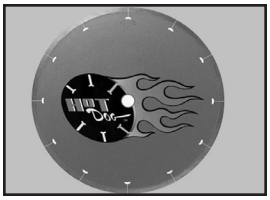


MK-770 EXP Frame and Water Pan

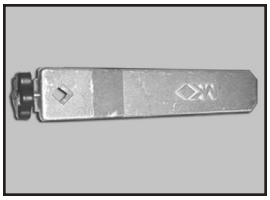
MK-770 EXP Cutting Head

Height Adjusting Knob

Flat Washer and Table Clip



Diamond Hot Dog® Blade



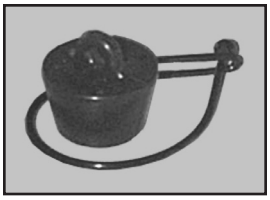
Adjustable Cutting Guide

Electric Water Pump

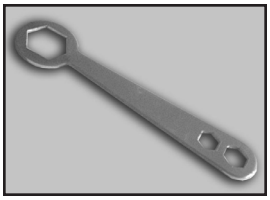
Pump Discharge Fitting

Cooling Transfer Tube

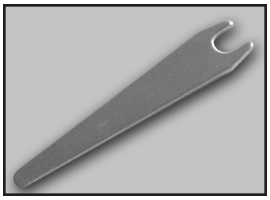
Flow Adjusting Clamp



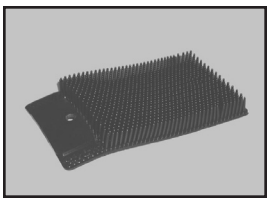
Drain Plug



Blade Nut Wrench



Inner Flange Wrench



Splash Guard

Owners Manual

Pump Manual

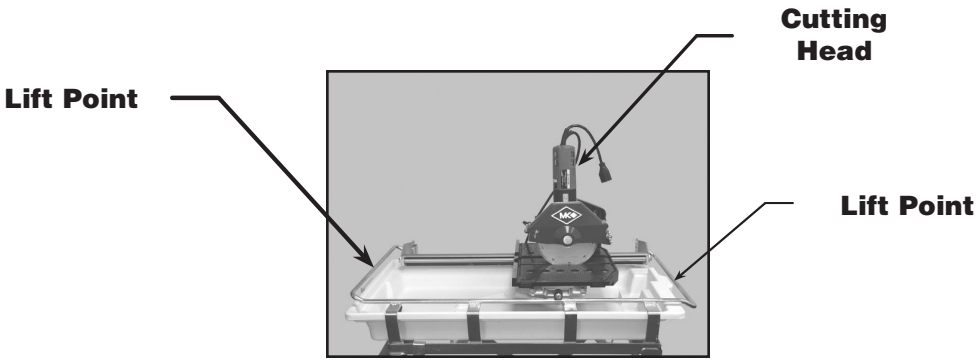
Warranty Card

TRANSPORT:

CAUTION
1. The MK-770 EXP weighs approximately forty-six (46) pounds; use care when transporting.
2. Never transport the MK-770 EXP with water in the Water Pan.

The MK-770 EXP is designed with a rigid frame and removable Cutting Head making the saw easily transportable. Always use proper lifting techniques when lifting the MK-770 EXP. Never transport the MK-770 EXP with water in the Water Pan.

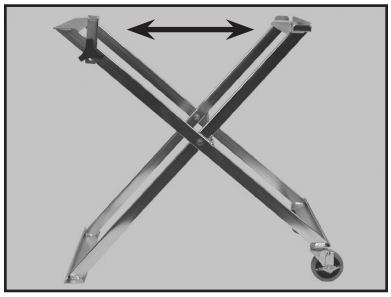
To lift the saw, grasp the front and back of the frame at the lift points shown below.



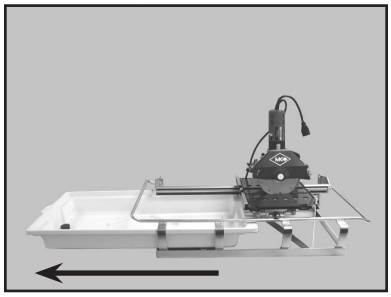
TILE SAW STAND

CAUTION
1. The MK-770 EXP weighs approximately forty-six (46) pounds; use care when transporting.
2. Never transport the MK-770 EXP with water in the Water Pan.

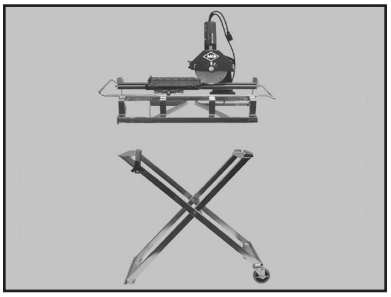
NOTE: If using the MK Diamond, Tile Saw Stand, follow these steps.



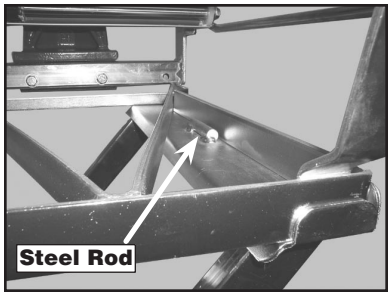
(A)
Open the Stand
and place on flat surface



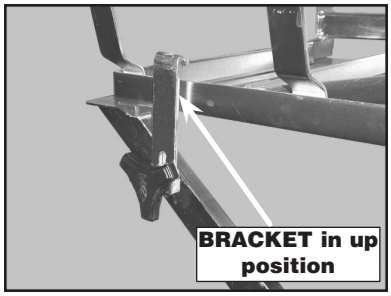
(B)
Remove Water Pan



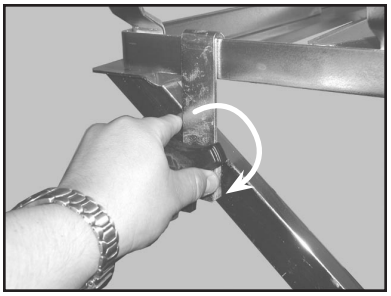
(C)
Orient the Saw
to the Stand



(D)
Seat Back Side of saw onto
stand between wall and
steel rod indicator



(E)
Seat Front Side of saw onto
stand and make sure that the
BRACKET is in the up position



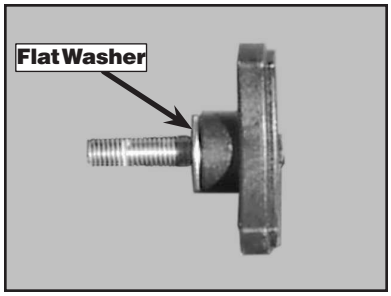
(F)
Lock the saw and tight the
knob in a clockwise direction.
Reinstall the water pan.

ASSEMBLY:

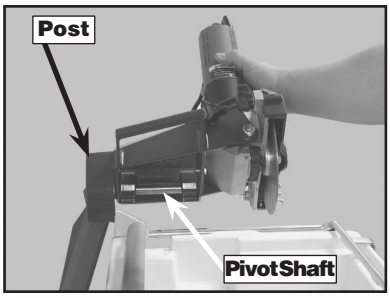
Follow the assembly instructions to prepare your MK-770 EXP for operation.

1. Cutting Head Installation:

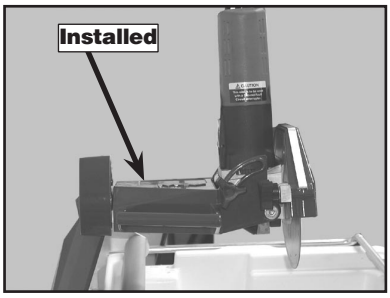
NOTE: If the Cutting Head is installed, go to step 2.



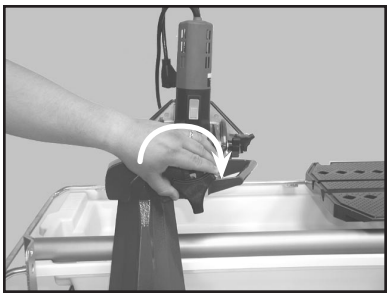
(A)
Place the Flat Washer onto the Height Adjusting Knob



(B)
Align Cutting Head Pivot Hole to the Post, Pivot Shaft



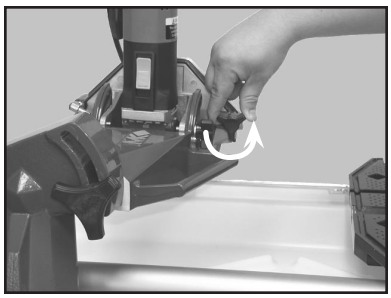
(C)
Verify the Cutting Head is completely installed and seated on the Post



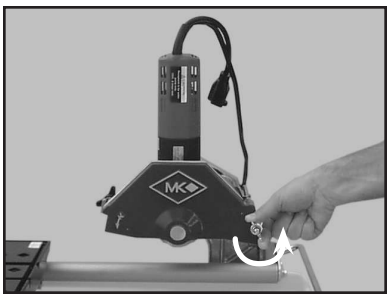
(D)
Install the Height Adjusting Knob through the Post into the Cutting Head and tighten the Knob

2. Diamond Blade Installation:

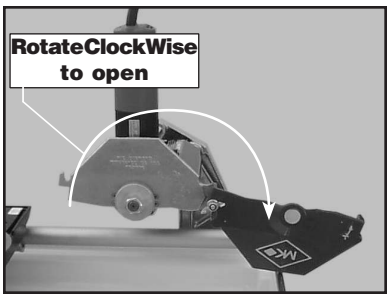
NOTE: When installing the Retaining Screw, do not "cross-thread" and DO NOT over tighten the screw.



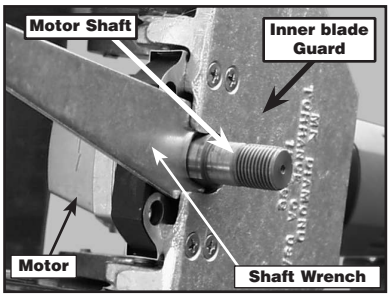
(A)
Loosen and remove the Blade Guard, Retaining Knob



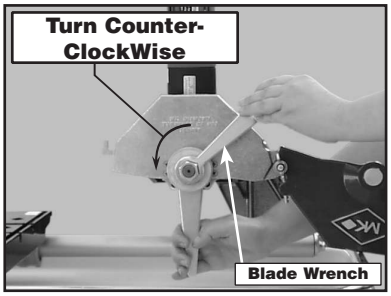
(B)
Loosen the Blade Guard, Retaining Wing nut



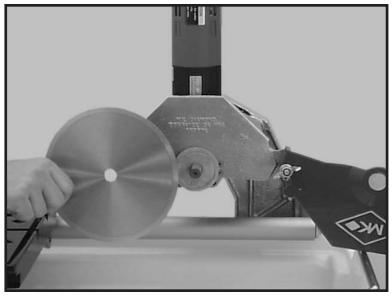
(C)
Open the Blade Guard



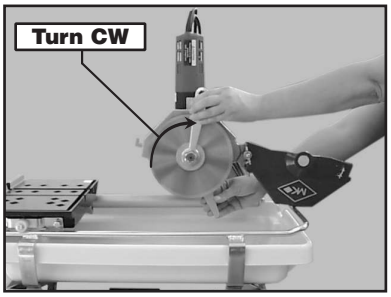
(D)
Place the Shaft Wrench between the Inner Blade Guard and the Motor and onto the Motor Shaft



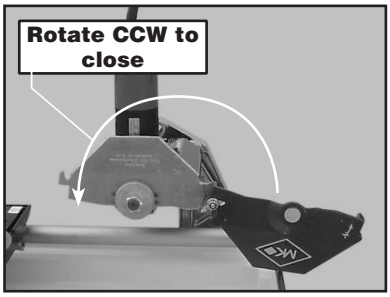
(E)
Using the Blade and Shaft Wrenches, loosen and remove the Retaining Nut and Outer Flange



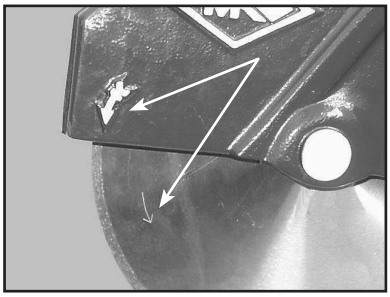
(F)
Install Diamond Blade onto Blade Shaft



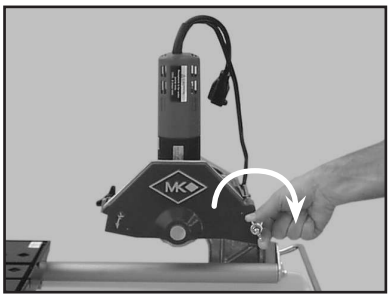
(G)
Install the Retaining Nut and Outer Flange and then tighten using the Blade and Shaft Wrenches



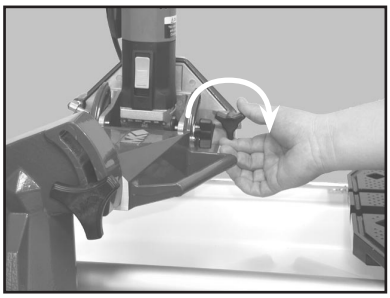
(H)
Close the Blade Guard



(I)
Verify the Blade is seated on the Blade Shaft and direction of rotation is correct



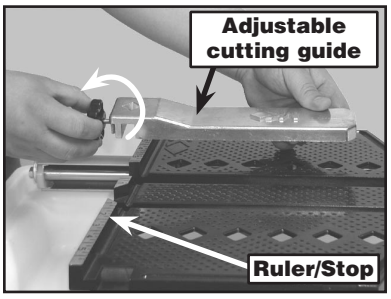
(J)
Tighten the Blade Guard Retaining, Wing nut



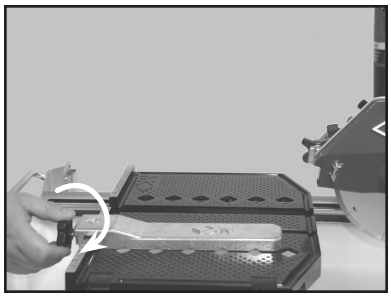
(K)
Tighten the Blade Guard, Retaining Knob

3. Adjustable Cutting Guide Installation:

NOTE: The Adjustable Cutting Guide can be used on either side of the Diamond Blade.



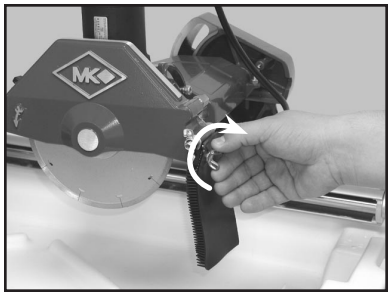
(A)
Loosen Adjustable Cutting Guide retaining thumbscrew and place it over the Movable Cutting Table, Ruler/Stop



(B)
Place the Adjustable Cutting Guide onto the Movable Cutting, Table Ruler/Stop and tighten the retaining thumbscrew

4. Splash Guard Installation

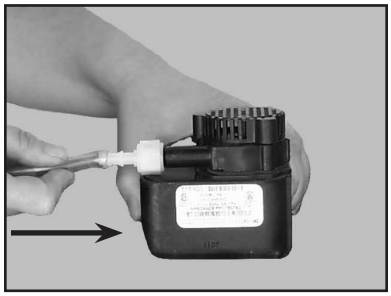
(A)
Install the retaining thumbscrew through the washer and Splash Guard then align to the hole found on back of the Blade Guard



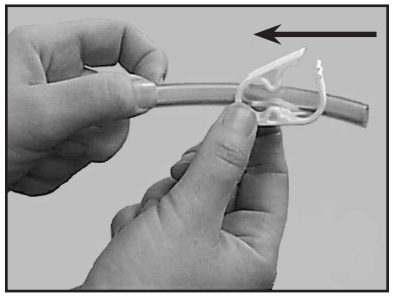
(B)
Install the Splash Guard onto the Blade Guard

5. Water Pump Preparation:

(A)
Install Water Pump Discharge Fitting



(B)
Press one end of the Cooling Transfer Tube onto the Water Pump Discharge Fitting

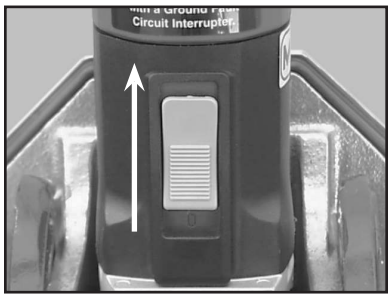


(C)
Slide Cooling Flow Adjusting Clamp onto the Cooling Transfer Tube

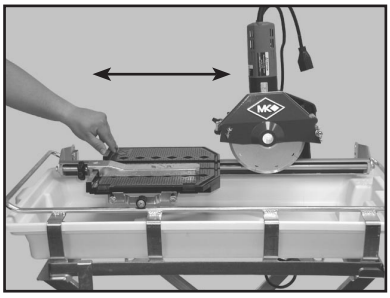
SETUP:

1. Pre-start Inspection:

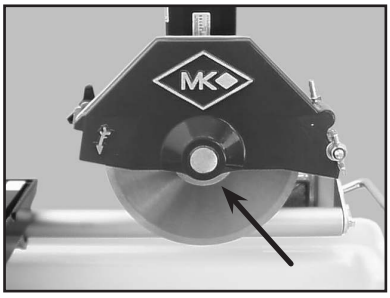
Prior to beginning work, a pre-start inspection of the saw should be performed.



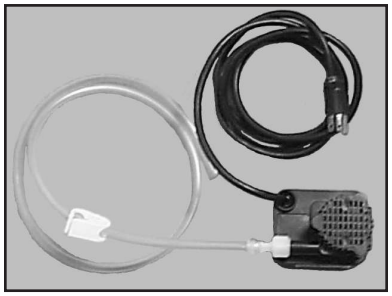
(A)
Ensure the ON/OFF Switch is in the OFF position



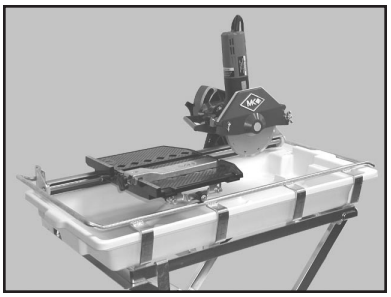
(B)
Verify the Movable Cutting Table moves freely



(C)
Inspect the Diamond Blade for damage – verify the blade is correct for the type of material being cut



(D)
Inspect the Pump Assembly for damage – ensure the cord is free of cracks or cuts



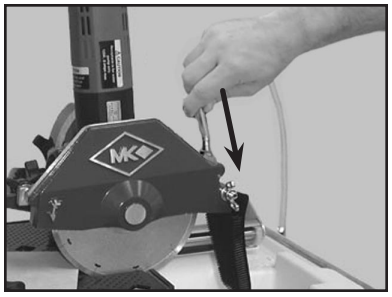
(E)
Inspect the MK-770 EXP for damage – ensure the cord is free of cracks or cuts

2. Connecting the Water Pump:

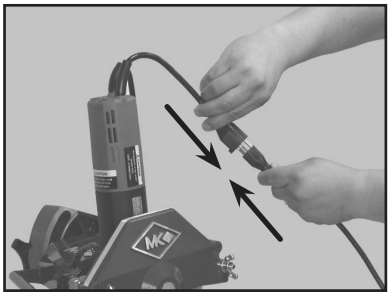
WARNING

1. To prevent the possibility of electrical shock, the MK-770 EXP MUST be de-energized when connecting the Water Pump.
2. To prevent the possibility of electrical shock, use only MK Diamond qualified replacement parts.

NOTE: To prevent pump damage, the Water Pump must be disconnected if cutting with a Dry Blade.



(A)
Connect the Cooling Transfer Tube to the inlet connection of the Blade Guard

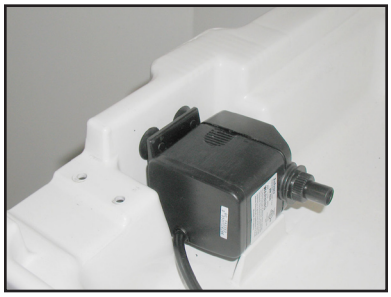


(B)
Connect the Water Pump power cord to the connection found on the back of the motor

3. Water Pump Setup for Operation:

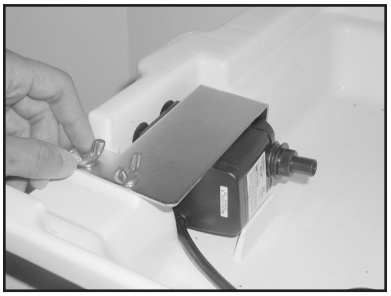
The Water Pump can be setup for operation in two ways: external Water Source or Re-circulation.

NOTE: If using a dry blade for operation, DO NOT connect the water pump.



(A)
Place Water Pump in Water Pan

(B)
Place Water Pump Clamp as shown, lining the holes.

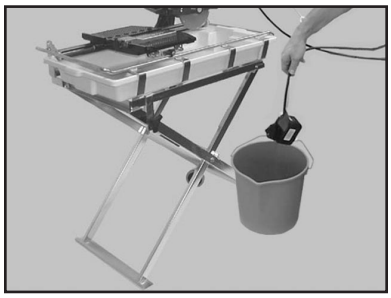


(C)
Secure Clamp with 1/4-20 wing screws and nuts.

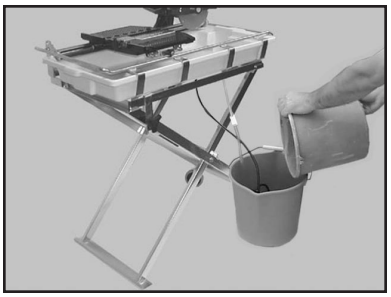
I. External Water Source:

This is the preferred method of cooling

(A)
Remove the Drain plug



(B)
Place the Water Pump In an external container

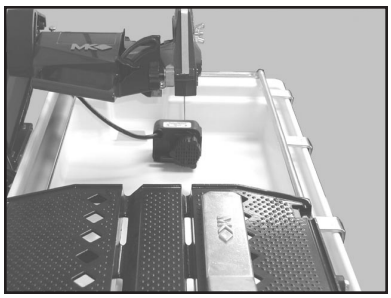


(C)
Fill the external container until water completely covers the Water Pump suction

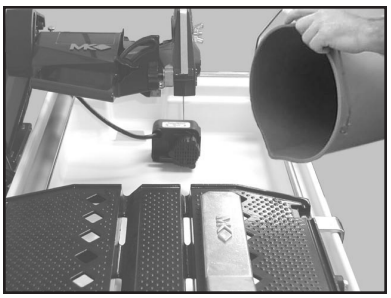
II. Re-circulation:

NOTE: When using the re-circulation method, the water should be changed often for longer pump life

(A)
Ensure the Drain Plug is installed in the Water Pan



(B)
Place the Water Pump in the back of the Water Pan



(C)
Fill the Water Pan until water completely covers the Water Pump suction

4. MK-770 EXP Setup for Operation

CAUTION

1. Before powering or starting, check for damage that could prevent this equipment from proper operation or performing it's intended function. Check for binding and alignment of moving parts. Check for damaged, broken, or missing parts.
2. Verify the On/Off switch is in the OFF position.
3. Before connecting the MK-770 EXP to a power supply, be sure the voltage, cycle and phase of the job site power source meet the requirements of TABLE 3

VOLTAGE	**115V**
CYCLE	**60Hz**
PHASE	**1-phase**

TABLE 3

4. **Use an approved Ground Fault Circuit Interrupter (GFCI)**
5. **Do not cover the motor vents as this could lead to motor overheating.**

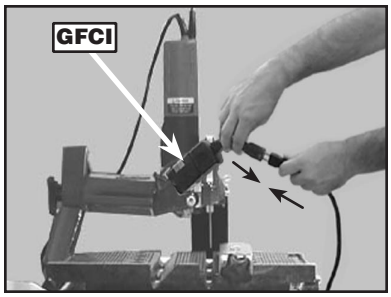
NOTE: 1. In order to avoid breaker tripping, a 20-amp circuit breaker should be used.
2. If using an extension power cord, make sure the length and wire gauge correspond to he requirements listed in TABLE 1 on page 9. An extension power cord that is too small in wire gauge (diameter), or too long in length, will cause the motor to overheat and could cause premature failure.

Portable Generator:

If using a portable generator to provide power, ensure the generator meets the following minimum requirements:

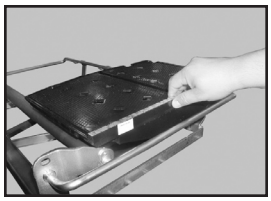
8 kW 120/240 V 66.7/33.3 Amps Single Phase

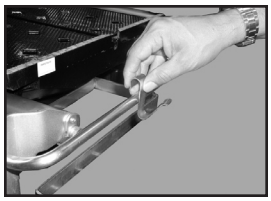
GFCI Connection

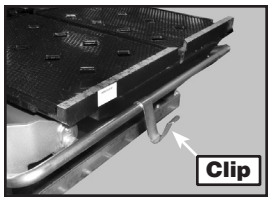


1. Ensure the ON/OFF Switch is in the OFF position
2. Plug MK-770 EXP into the GFCI
3. Plug the GFCI into the Power source.

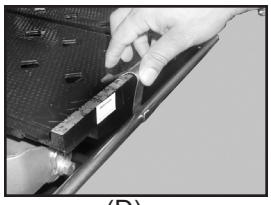
5. MK-770 EXP Table Clip

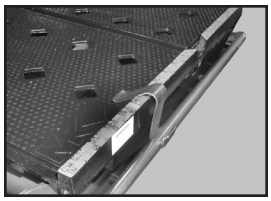

(A)

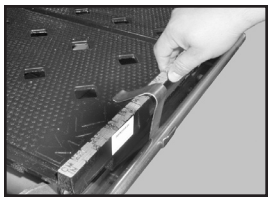

(B)



(C)


(D)


(E)

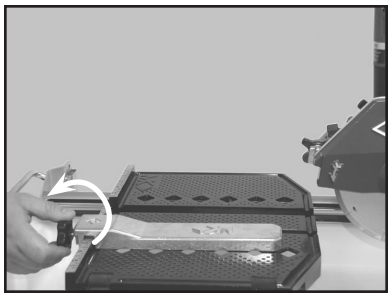

(F)

(A) Slide table to the front as shown.
(B) Snap hook end of the clip to the rail.
(C) Ensure that clip is secure.
(D) Swing clip over the back stop of the table.
(E) The table is secured.
(F) Move table to ensure it is secured in place.

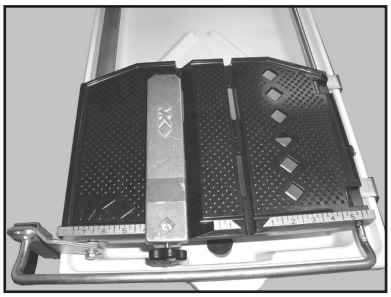
ADJUSTMENT & OPERATION

1. Cutting Straight Edges:

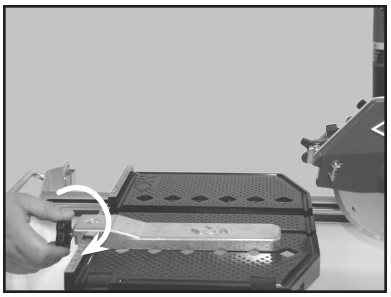
CAUTION DO NOT FORCE THE TOOL. It will do the job better and safer at the rate for which it was designed.



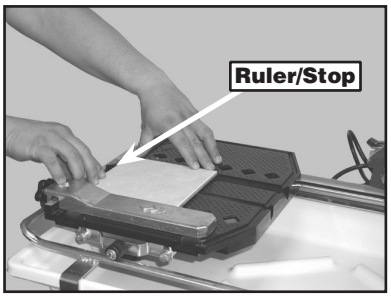
(A)
Loosen the Adjustable Cutting Guide retaining thumbscrew



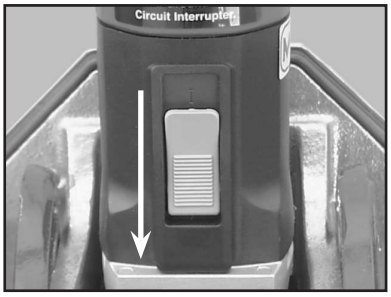
(B)
Position the Adjustable Cutting Guide to desired cut length



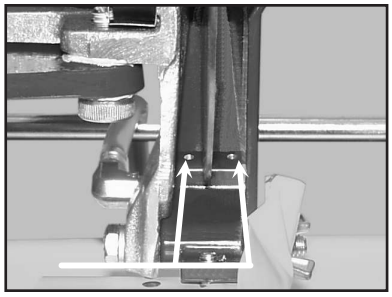
(C)
Tighten the retaining thumbscrew



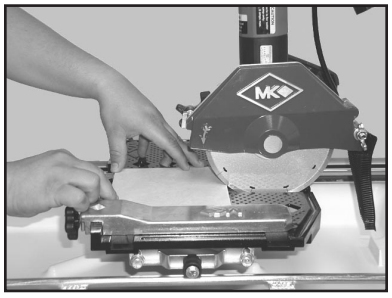
(D)
Place the tile against the Ruler/Stop and Cutting Guide



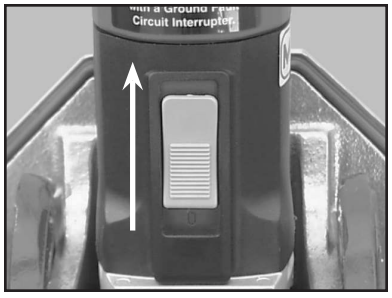
(E)
Turn the motor ON



(F)
Verify cooling flow on both sides of the blade



(G)
Perform the cut

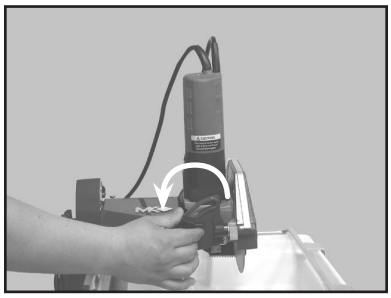


(H)
Turn the motor OFF when work is complete

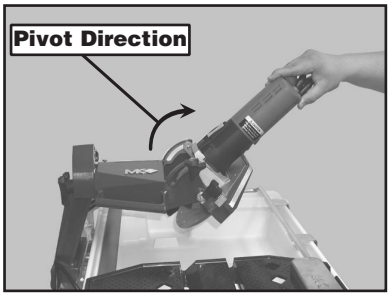
2. Cutting 45° Miters:

The MK-770 EXP is designed with an adjustable Cutting Head for precision 45º Miter Cuts.

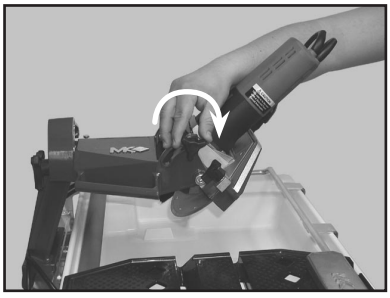
CAUTION DO NOT FORCE THE TOOL. It will do the job better and safer at the rate for which it was designed.



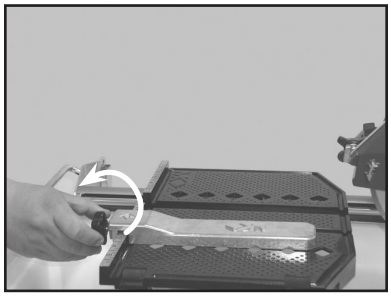
(A)
Loosen the Cutting Head Pivot, Retaining Knob



(B)
Pivot the Cutting Head to the 45º cutting position

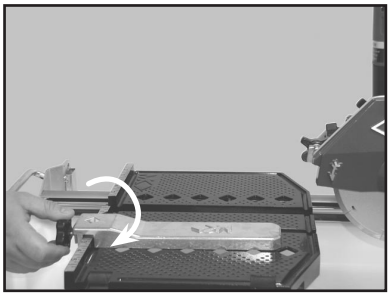


(C)
Tighten the Cutting Head, Pivot Retaining Knob

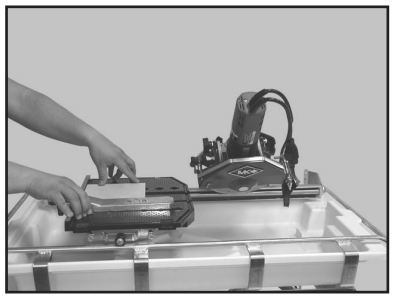


(D)
Loosen the Adjustable Cutting Guide retaining thumbscrew

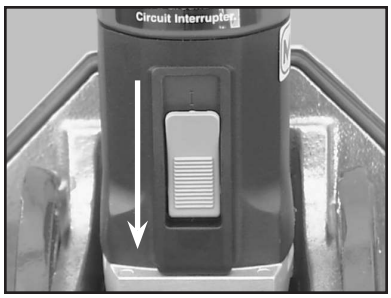
(E)
Position the Adjustable Cutting Guide to desired cut length indicated inside the diamond



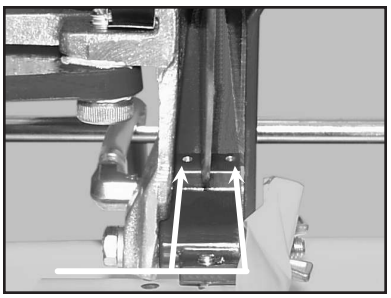
(F)
Tighten the retaining thumbscrew



(G)
Place the tile against the Ruler/Stop and Cutting Guide

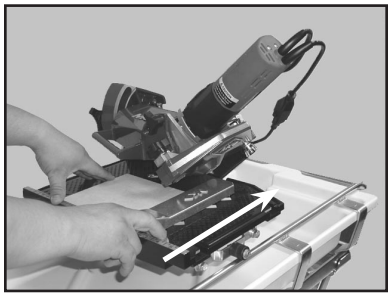


(H)
Turn the motor ON

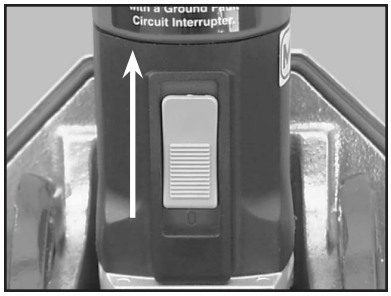


(I)
Verify cooling flow on both sides of the blade

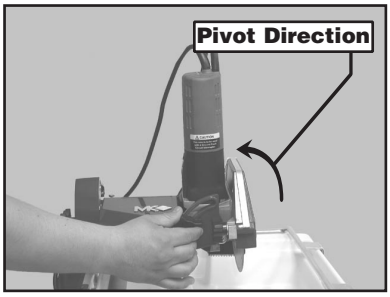
Cutting 45° Miters (cont...)



(J)
Perform the cut



(K)
Turn the motor OFF when work is complete

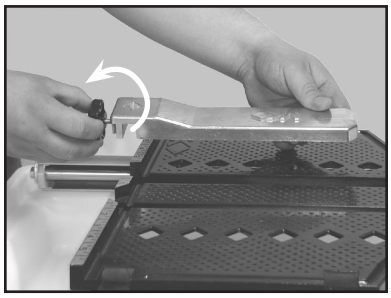


(L)
Return the Cutting Head to the upright position when complete

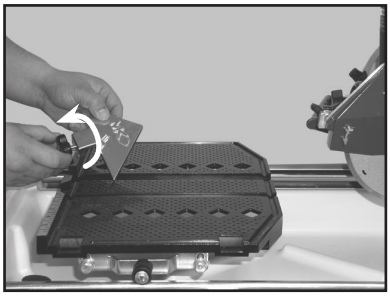
3. Diagonal Cutting:

NOTE: To cut diagonal, the Dual 45º Flat Angle Guide (MK Diamond Part No. 134557-MK) should be used (not Included).

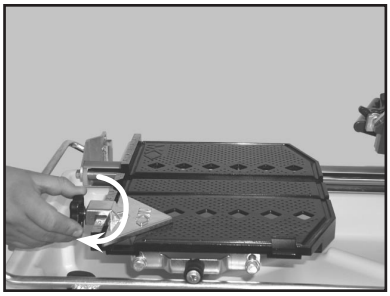
CAUTION DO NOT FORCE THE TOOL. It will do the job better and safer at the rate for which it was designed.



(A)
Remove the Adjustable Cutting Guide

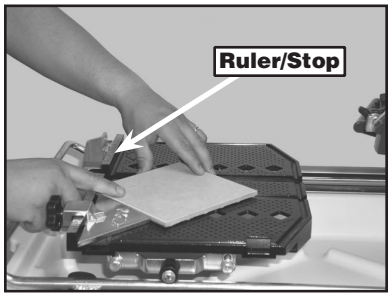


(B)
Place the Dual 45º Flat Angle Guide on the Ruler/Stop

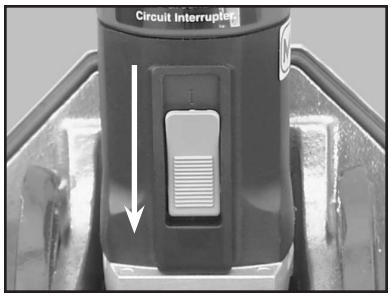


(C)
Position the Dual 45º Flat Angle Guide and tighten the retaining thumbscrew

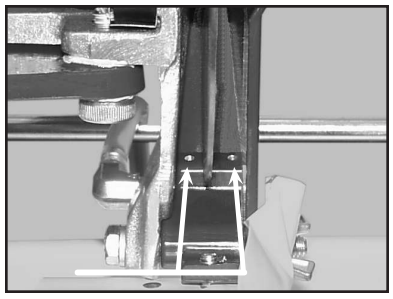
NOTE: If Cutting the tile in two equal halves, align the tile in the V-notch of the Movable Cutting Table Ruler/Stop.



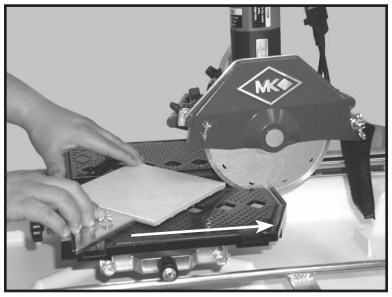
(D)
Position the tile against the Dual 45º Flat Angle Guide and the Ruler/Stop



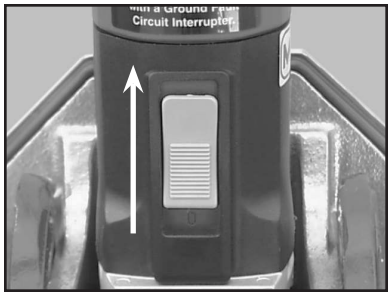
(E)
Turn the motor ON



(F)
Verify cooling flow on both sides of the blade



(G)
Perform the cut

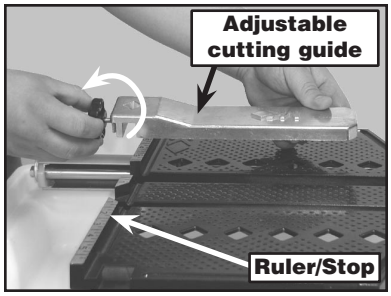


(H)
Turn the motor OFF when work is complete

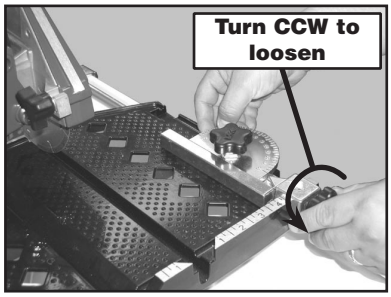
4. Off-angle Cutting:

NOTE: Use a Protractor (MK Part No. 134569-MK) should be used (not included).

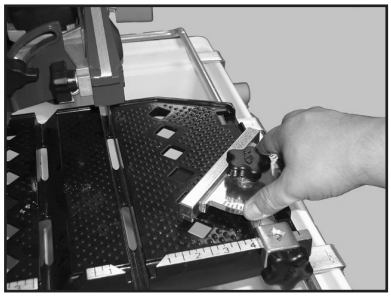
CAUTION DO NOT FORCE THE TOOL. It will do the job better and safer at the rate for which it was designed.



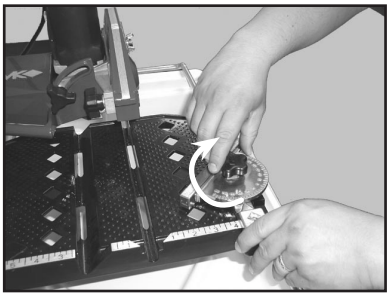
(A)
Remove the Adjustable Cutting Guide



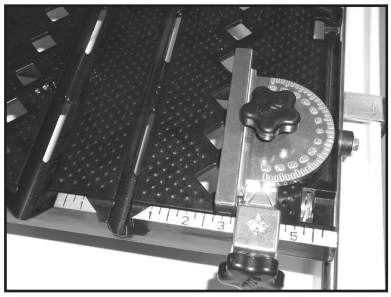
(B)
Place the Protractor on the Ruler/Stop



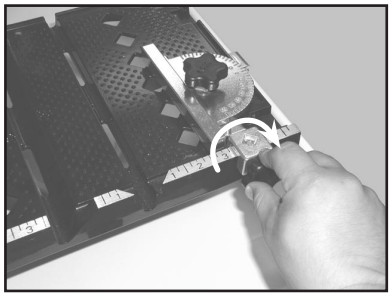
(C)
Set the desired angle on the Protractor Gage



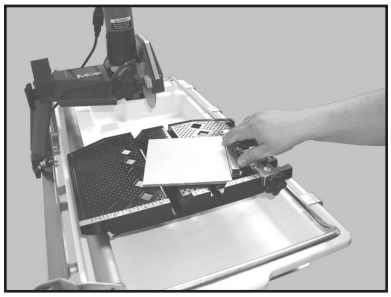
(D)
Tighten the Protractor Gage retaining knob



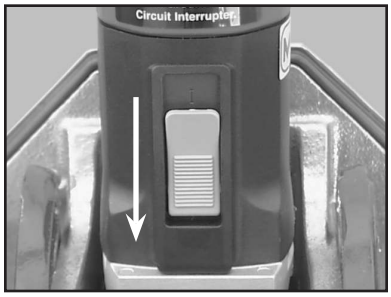
(E)
Position the Protractor Cutting Guide to the desired length



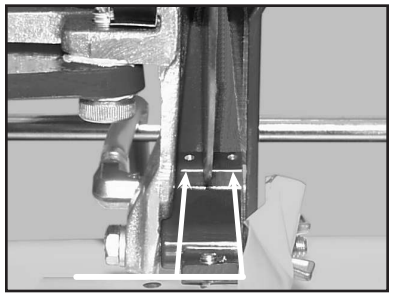
(F)
Tighten the retaining knob



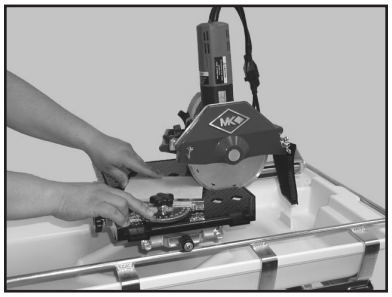
(G)
Position the tile against the Protractor and the Ruler/Stop



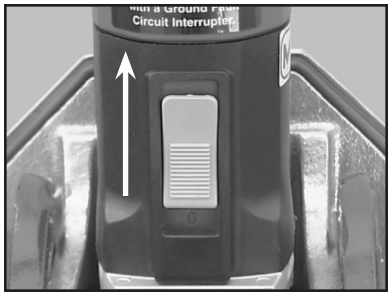
(H)
Turn the motor ON



(I)
Verify cooling flow on both sides of the blade



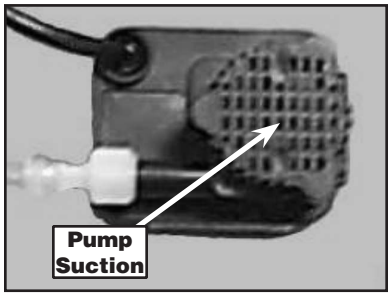
(G)
Perform the cut



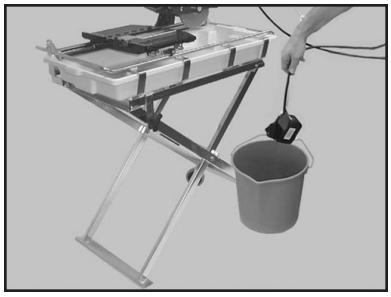
(H)
Turn the motor OFF when work is complete

CLEANUP

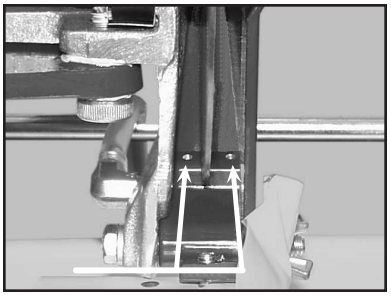
NOTES: 1. If an external water source was used, steps A through C may be skipped.
2. Dispose of wastewater in accordance with applicable Federal, State and Local laws.



(A)
Clean the Water Pump suction of all debris

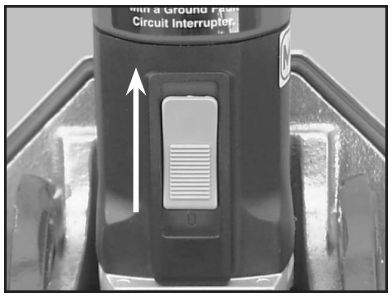


(B)
Place the Water Pump in an external container



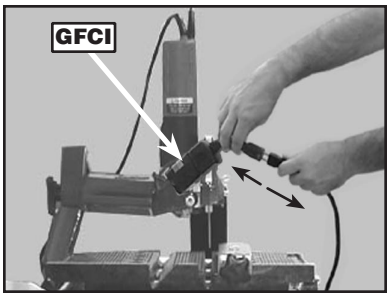
(C)
Run the MK-770 EXP until clear water is seen at the blade Cooling Flow Points (Approx. 1 minute)retaining thumbscrew

CAUTION Ensure the saw is disconnected before completing the remainder of the cleanup process.



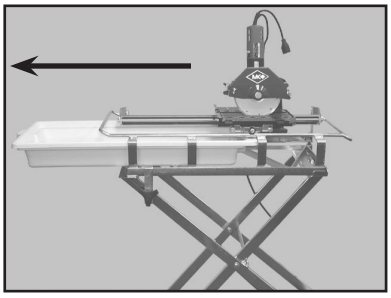
(D)
Ensure the ON/OFF Switch is in the OFF position

(E)
Unplug the GFCI from the Power source

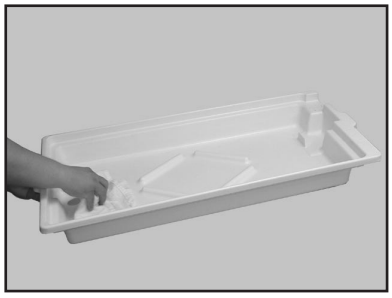


(F)
Unplug MK-770 EXP from the GFCI

(G)
Clean the MK-770 EXP with soap and clean water

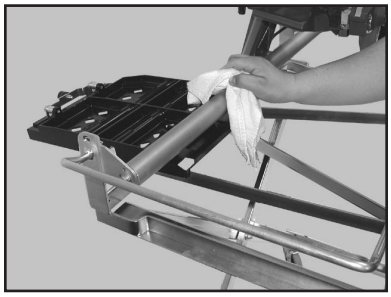


(H)
Remove the Water Pan from the MK-770 EXP



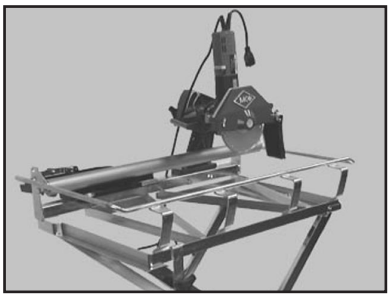
(I)
Clean the Water Pan

CAUTION Ensure water is not forced into the motor casing when cleaning.



(J)
Clean the Movable Cutting Table Guide Bar

(K)
Clean the Movable Cutting Table Roller Wheel Frame Support

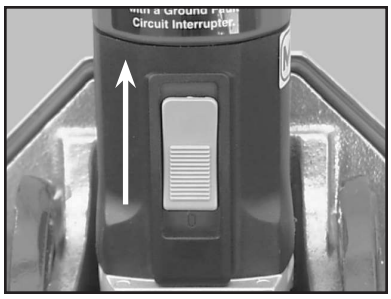


(L)
Clean the remainder of the MK-770 EXP

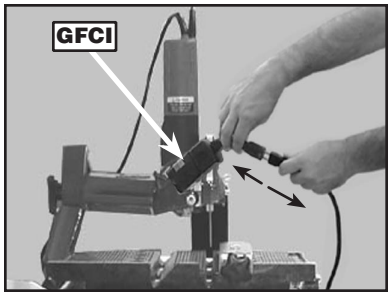
MAINTENANCE

1. Maintenance Following Use:

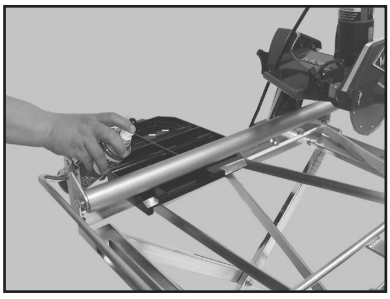
To extend the life of the MK-770 EXP, the following procedure should be performed after each use. Lubricate all points listed below with light oils such as, 3 in 1, WD-40, etc.



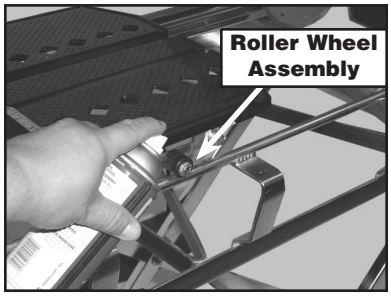
(A)
Ensure the ON/OFF Switch is in the OFF position



(B)
Unplug MK-770 EXP



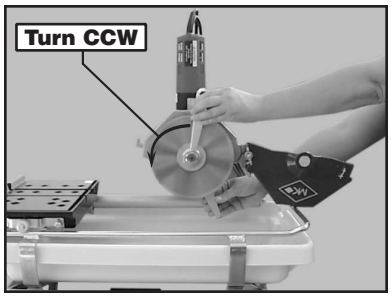
(C)
Lubricate the Guide Bar



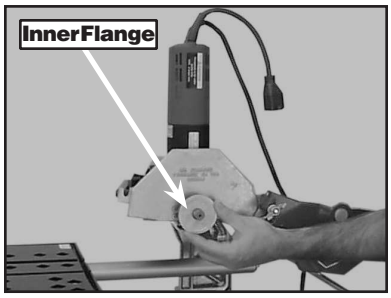
(D)
Lubricate the Roller Wheel Assembly

2. Monthly Maintenance:

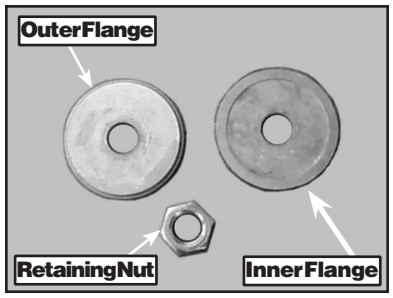
The following maintenance should be performed Monthly.



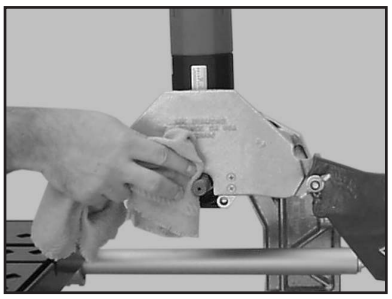
(A)
Remove the Diamond Blade, Outer Flange and Retaining Nut



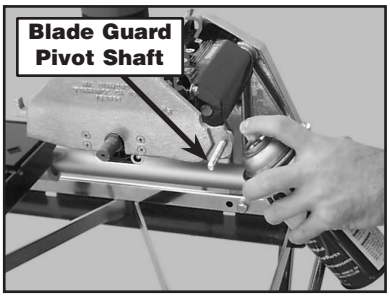
(B)
Remove the Inner Flange



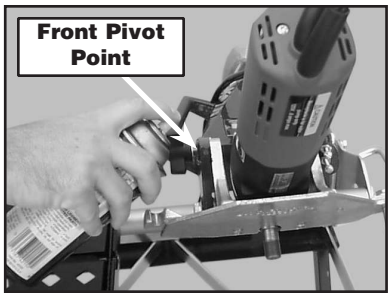
(C)
Clean and Lubricate the Inner and Outer Flanges and the Retaining Nut



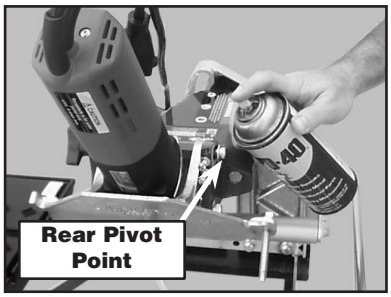
(D)
Clean around Motor Shaft



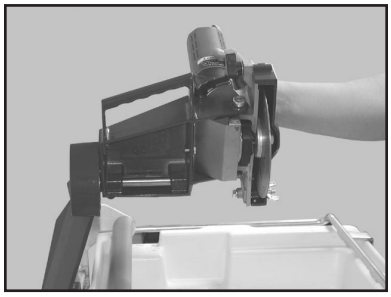
(E)
Remove the Blade Guard then clean and Lubricate the Blade Guard Pivot Shaft



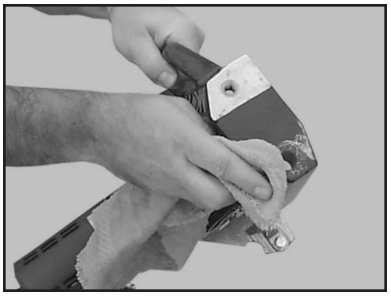
(F)
Lubricate the front Cutting Head Pivot Point



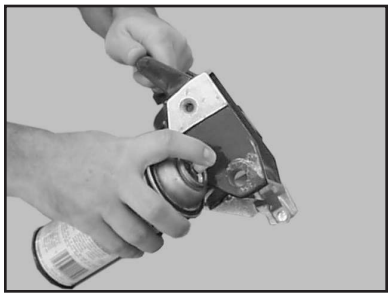
(G)
Lubricate the rear Cutting Head Pivot Point



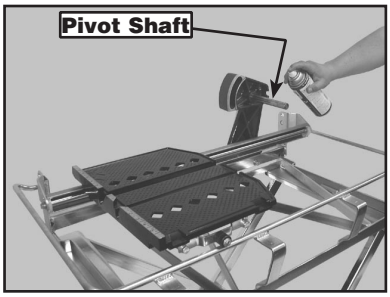
(H)
Remove the Cutting Head



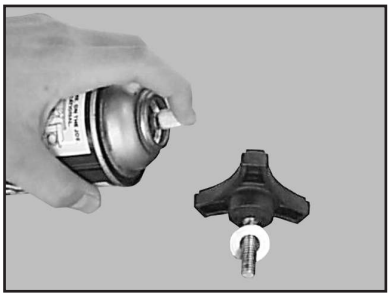
(I)
Clean the Cutting Head Pivot Holes



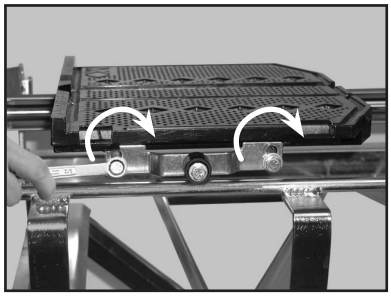
(J)
Lubricate the Cutting Head Pivot Holes



(K)
Lubricate the Cutting Head Pivot Shaft



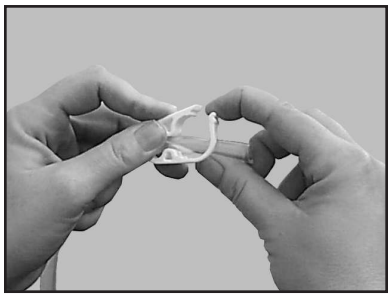
(L)
Lubricate the Cutting Head Adjustment Knob



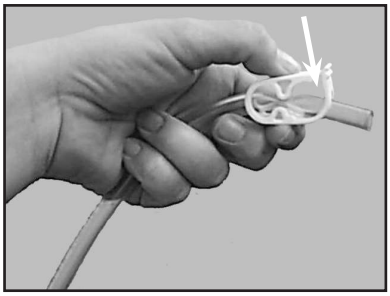
(M)
Verify the Cutting Table Roller Wheel Assembly is tight

3. Flow Adjustment:

NOTE: If flow to the diamond blade requires adjustment, perform the following actions.



(A)
Increase cooling flow by releasing the Flow Adjusting Clamp



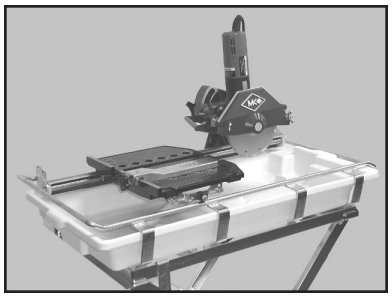
(B)
Reduce cooling flow by Pressing down on the Flow Adjusting Clamp

4. Blade Dressing

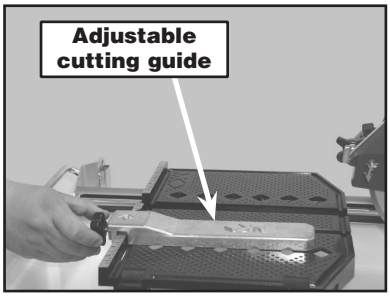
Like most cutting instruments, a diamond blade performs best when it is dressed. Over time and use, diamonds on the outer edge of the blade will become smoothed or “glazed” over.

This will reduce grinding efficiency and may cause the blade to “wander” or bend giving the illusion of an alignment problem. When this occurs, the blade will need to be dressed.

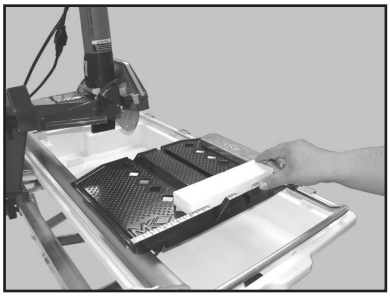
The diamond blade can be dressed using the MK Dressing Stick (part number 152792) and by following the steps below.



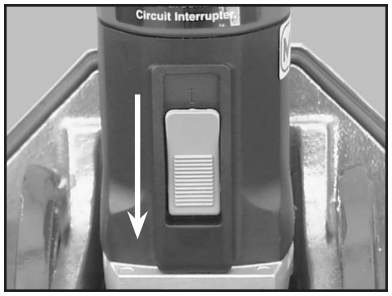
(A)
Setup the MK-770 EXP for operation (See Setup, Adjustment and Operation)



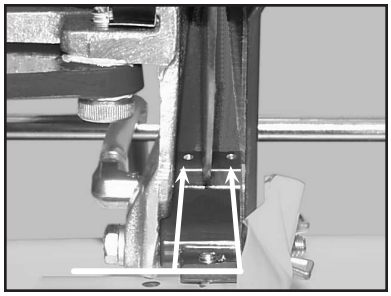
(B)
Set the Adjustable Cutting Guide to cut a 1/16-strip



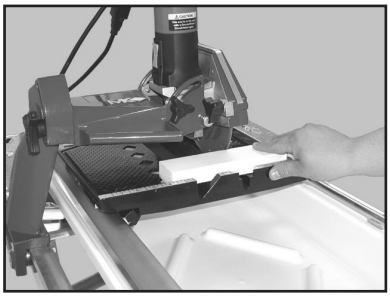
(C)
Position the Dressing Stick



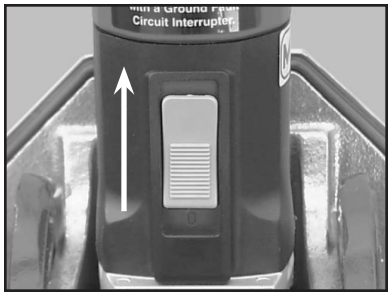
(D)
Turn the motor ON



(E)
Verify cooling flow on both sides of the blade



(F)
Cut the Dressing Stick 7 or 8 times to dress the Blade

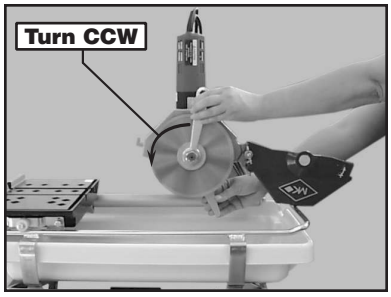


(G)
Ensure the ON/OFF Switch is in the OFF position

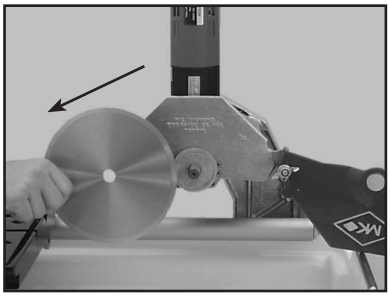
5. Diamond Blade Change-out:

NOTE: When installing the Retaining Screw, do not “cross-thread” and DO NOT over tighten the screw.

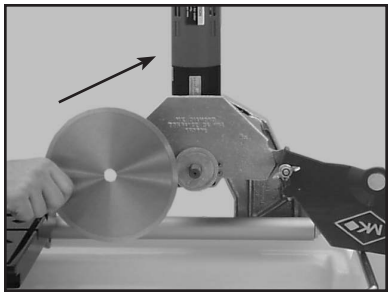
(A)
Open the Outer Blade



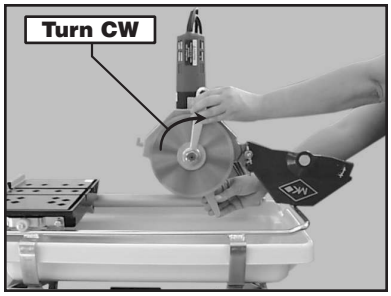
(B)
Remove Retaining Nut and Outer Flange



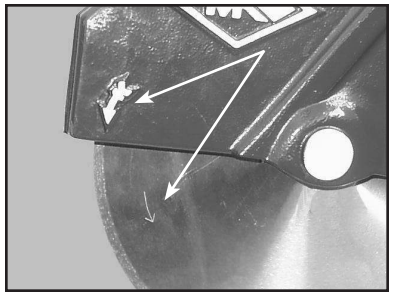
(C)
Remove Diamond Blade from Blade Shaft



(D)
Install the Diamond Blade onto Blade Shaft



(E)
Install the Retaining Nut and Outer Flange and then tighten using the Blade and Shaft Wrenches



(F)
Verify the Blade is seated on the Blade Shaft and direction of rotation is correct

(G)
Close the Outer Blade

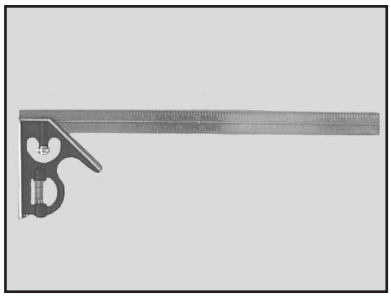
MAINTENANCE AND TROUBLESHOOTING

TABLE ALIGNMENT:

The Movable Cutting Table of the MK-770 is pre-aligned in the factory. It may become misaligned with the Cutting Head of the Tile Saw overtime. Should misalignment occur, perform the following steps to realign it.

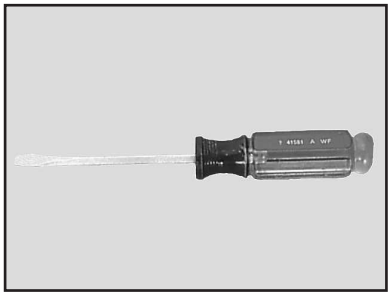
NOTE: If alignment problems are the result of a warped blade, a bent frame or bent support arm, or, if alignment is off by more than 1/8-inch, contact the MK Diamond Service Center – (800) 474-5594

TOOLS NEEDED:

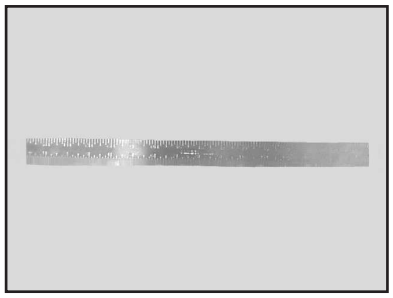


Combination Square 12-inch or Greater

1/4-inch Wrench

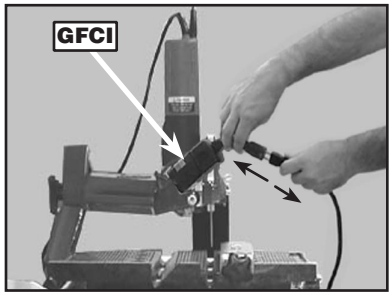


Flat Head Screwdriver

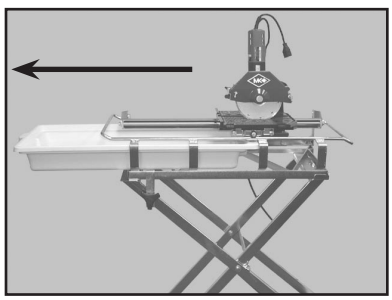


Metal Straight Edge

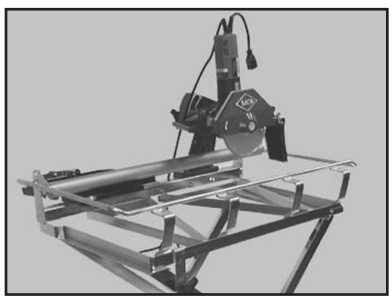
PREPARATION:



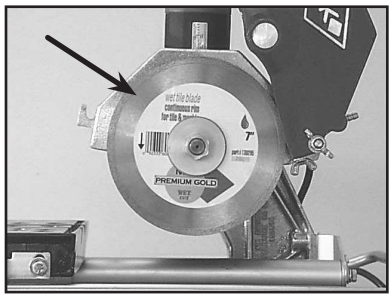
(A)
Remove Tile Saw from Power Source



(B)
Remove Water Pan



(C)
Inspect Tile Saw for damage

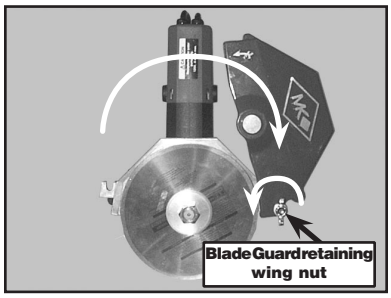


(D)
Inspect Diamond Blade for damage

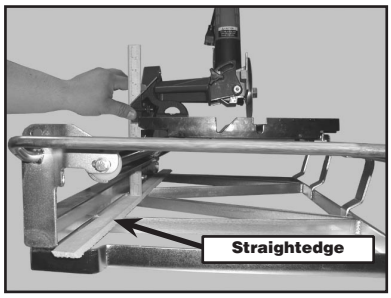
Movable Cutting Table Alignment Verification:

This will verify the Movable Cutting Table is aligned to the frame of the saw.

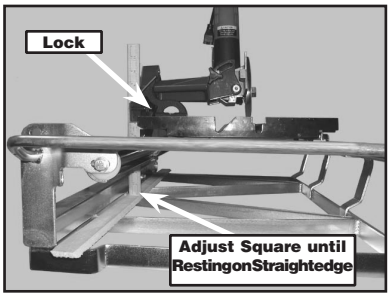
NOTES: If the blade is misaligned following alignment verification, attempt to align using Alignment Screw, 90º Verification. The Diamond Blade must be removed and reinstalled when removing the Blade Guard.



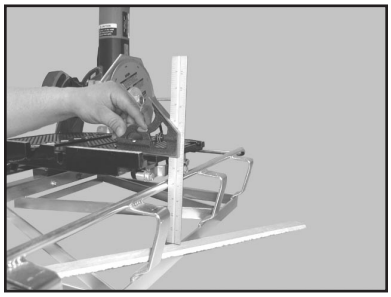
(A)
Remove Blade Guard



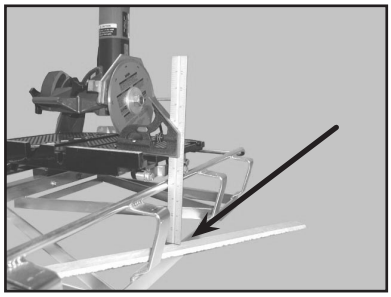
(B)
Place straight edge on frame and Square on cutting table



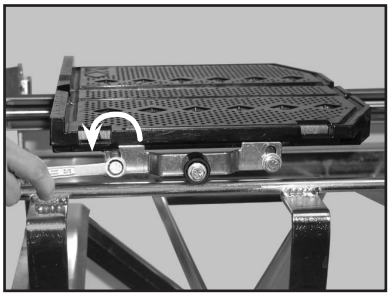
(C)
Lock in position



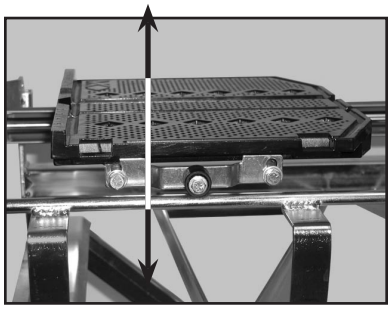
(D)
Move Straightedge to the other side, and place the Square on that side of table



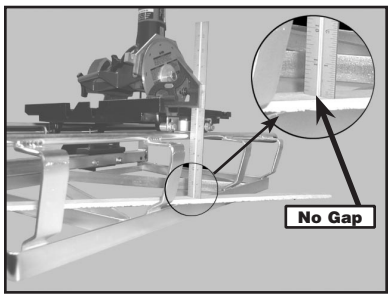
(E)
Check for Gap between the Square and Straightedge



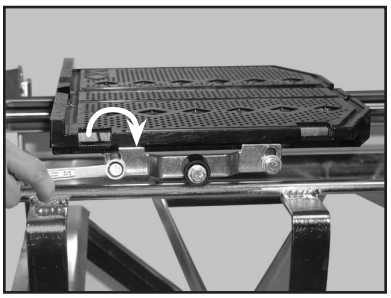
(F)
If Gap exists, loosen Movable Cutting Table Wheel Assembly



(G)
Move Wheel Assembly up or down to Square the Movable Cutting Table



(H)
Re-Verify Wheel Assembly side of Movable Cutting Table height is same as Guide Bar side

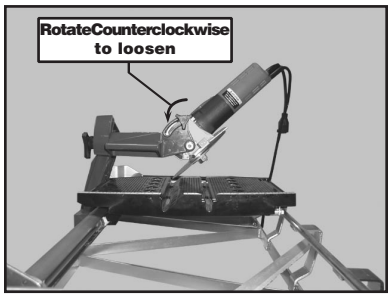


(I)
Tighten Movable Cutting Table Wheel Assembly

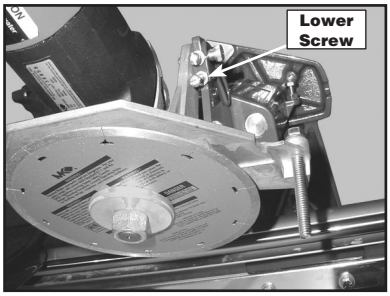
Alignment Screw, 90° Verification:

90º-alignment verification will ensure that the blade will cut the tile straight up and down and not at an angle.

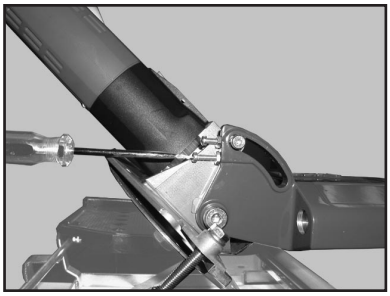
NOTES: If the blade is misaligned following this alignment procedure, return the saw to MK Diamond for repair. The Diamond Blade must be removed and reinstalled when removing the Blade Guard.



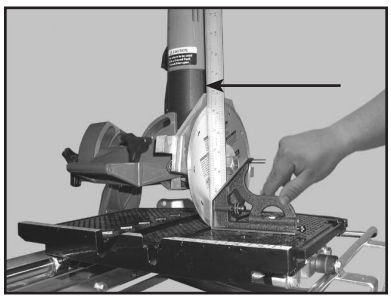
(A)
Position the Cutting Head to the 45º Cutting Angle



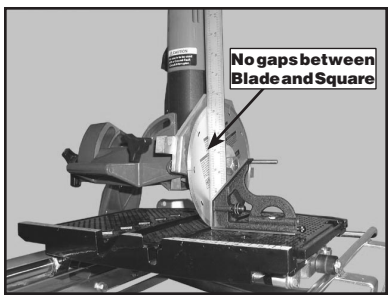
(B)
Locate the 90° Adjustment Screw



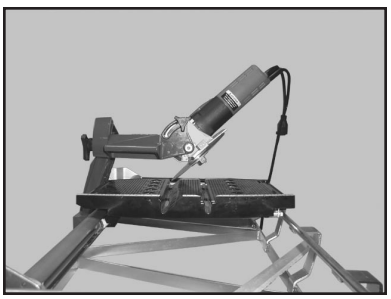
(C)
Rotate 90° Adjustment Screw clockwise or counter-clockwise to realign Cutting Head



(D)
Position the Square on Movable Cutting Table against the Diamond Blade



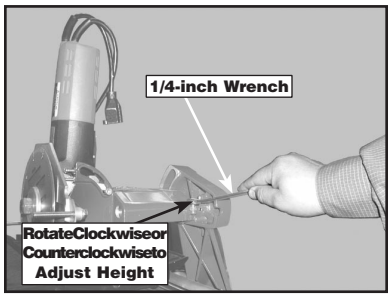
(E)
Verify the Diamond Blade is Square to the Movable Cutting Table



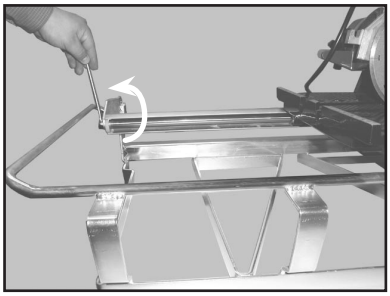
(F)
Repeat Steps A to E as necessary to align the Cutting Head

Horizontal Rough Alignment:

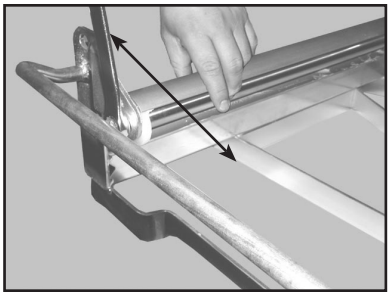
The Horizontal alignment will ensure that straight cuts (or Rip Cuts) are made.



(A)
Position Cutting Head to normal Cut Depth

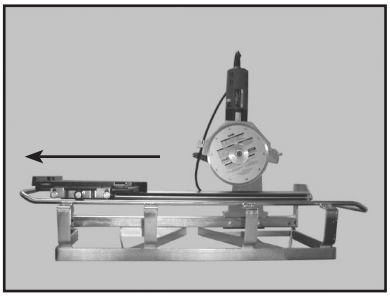


(B)
Loosen front and rear Guide Bar Retaining Bolts

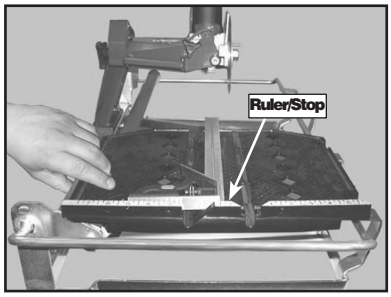


(C)
Move Guide Rail until the Blade is centered in Cutting Groove

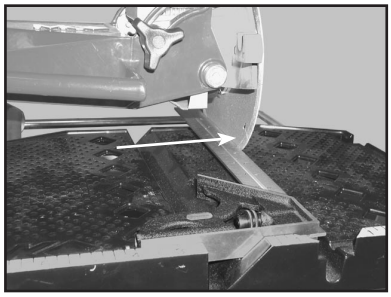
Horizontal Final Alignment:



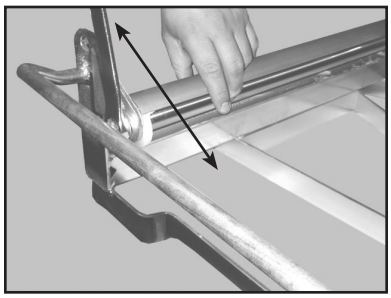
(A)
Pull Movable Cutting Table to front of Tile Saw



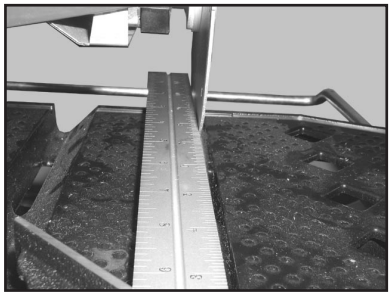
(B)
Position Square flat on Movable Cutting Table against Ruler/Stop



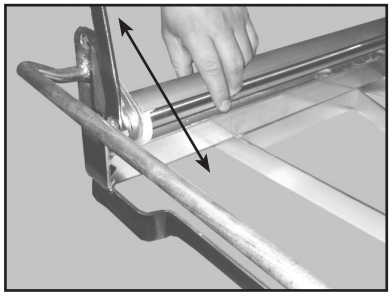
(C)
Position front of Square against Blade



(D)
Move Guide Bar until Square rests evenly across Blade

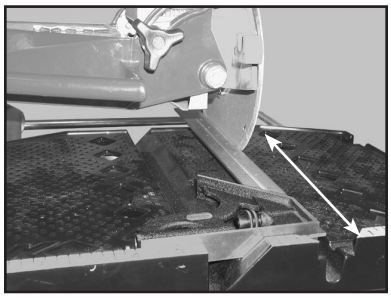


(E)
Position end of Square against Blade

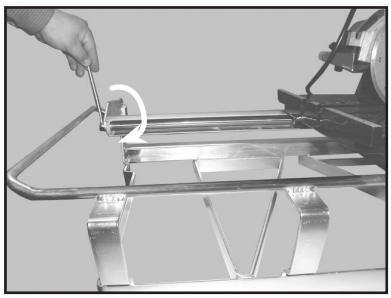


(F)
Move Guide Bar using Adjusting Bracket until Square rests evenly across Blade

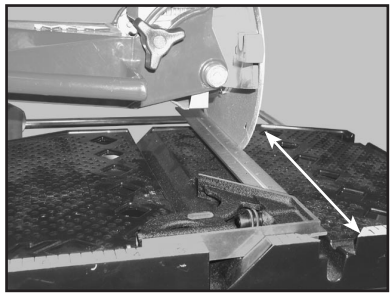
Horizontal Alignment Verification:



(A)
Move the Cutting Table back and forth to verify Blade is even across all points of Square



(B)
Tighten Guide Bar Retaining Bolts

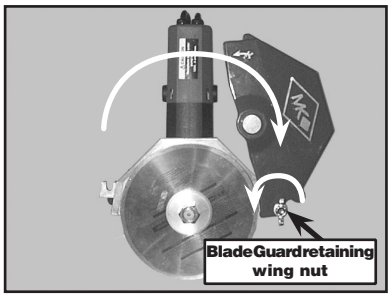


(C)
Move the Cutting Table back and forth to re-verify Blade is even across all points of Square

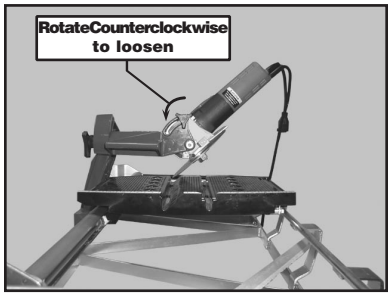
45° Alignment Verification:

The 45° Alignment Verification is done to ensure the blade will cut tile at a 45° angle.

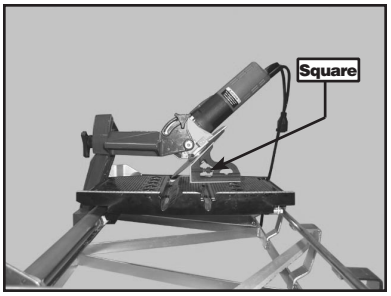
NOTES: If the blade is misaligned following this alignment procedure, return the saw to MK Diamond for repair. The Diamond Blade must be removed and reinstalled when removing the Blade Guard.



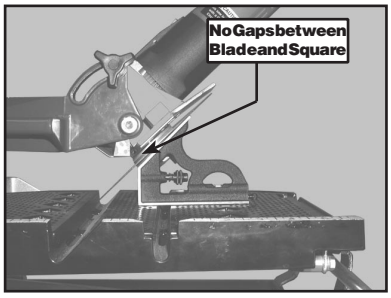
(A)
Remove Blade Guard (If not done Previously)



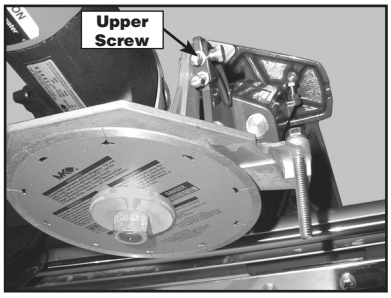
(B)
Position the Cutting Head to the 45° Cutting Angle



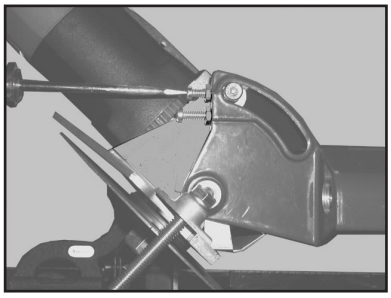
(C)
Place Square on the Movable Cutting Table and position the Square against the Blade



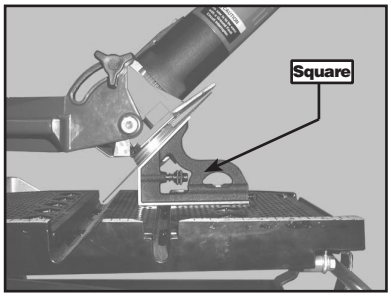
(D)
Verify Blade is even across all points of Square



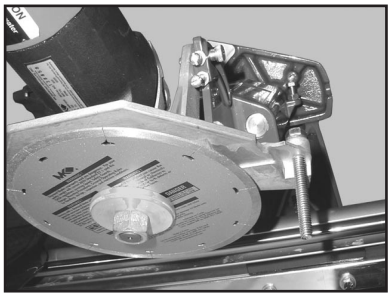
(E)
To Adjust 45° Cutting Angle, locate the 45° Adjustment Screw



(F)
Rotate 45° Adjustment Screw clockwise or counter-clockwise to realign 45° Cutting Angle



(G)
Verify Blade is now even across all points of Square

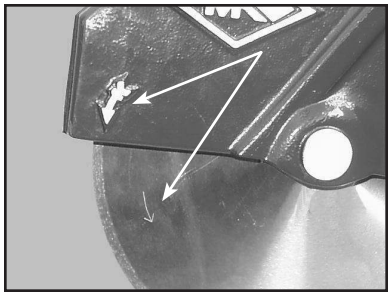


(H)
Repeat steps A to G until Blade is even across all points of Square

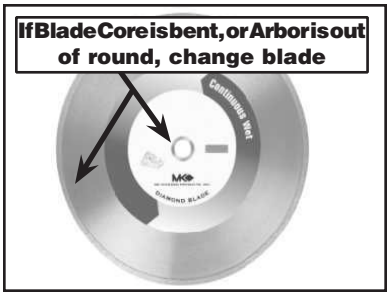
TROUBLESHOOTING

1. Blade will not cut properly:

(A)
Check for Smoothness or "Glazing" (Dress blade if needed)



(B)
Check for proper rotation

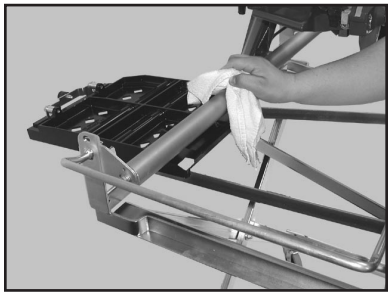


(C)
Ensure the Blade Core is not bent and Arbor is not out of round

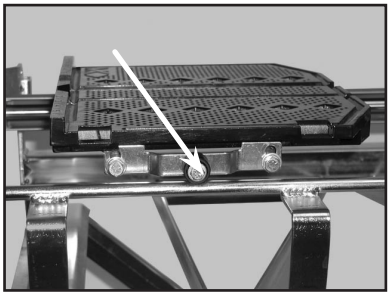
(D)
Verify the blade is correct for the material being used

(E)
Return to MK Diamond for Repair

2. Movable Cutting Table Does Not Move Smoothly:



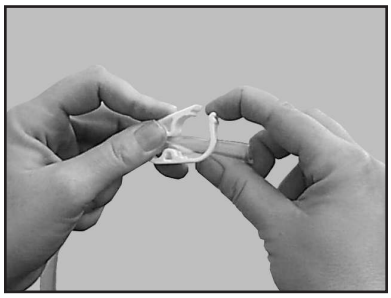
(A)
Check that the Guide Bar is clean – clean if dirty



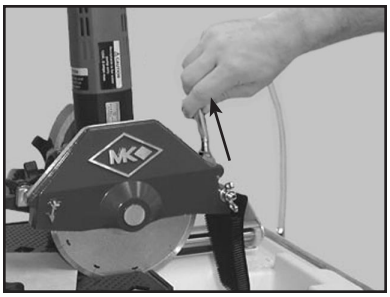
(B)
Check the Movable Cutting Table Roller Wheel for wear replace if necessary

(C)
Return to MK Diamond for Repair

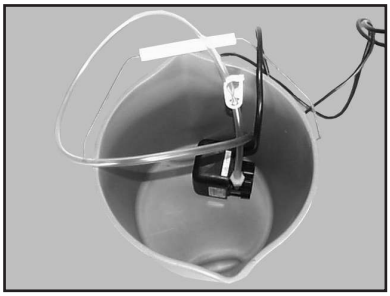
3. Cooling Flow:



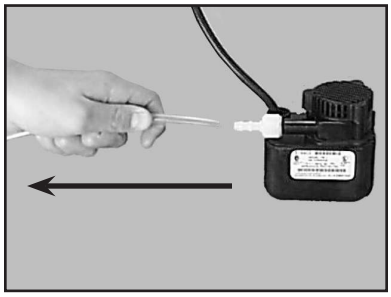
(A)
Check cooling flow Adjusting Clamp open



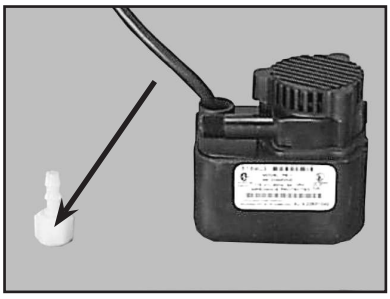
(B)
Remove the Cooling Transfer Tube from the Blade Guard inlet



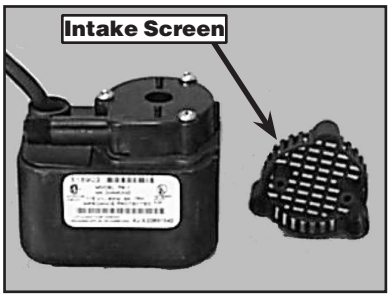
(C)
Place Pump into a bucket of water and check flow



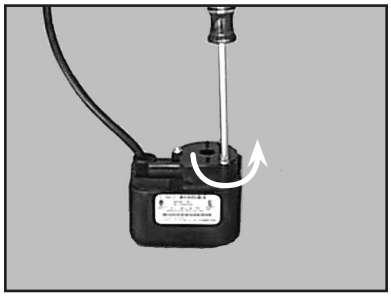
(D)
Remove the Cooling Transfer Tube and check flow



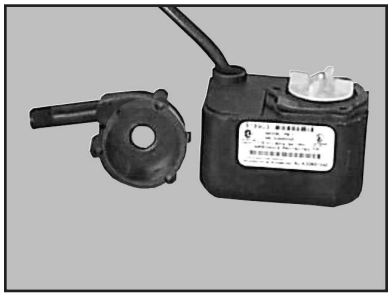
((E)
Remove the Pump Discharge Fitting and check



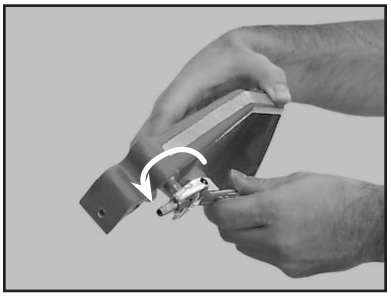
(F)
Remove the Pump Intake Screen and check for debris



(G)
Remove the 3 Pump Casing Retaining Screws

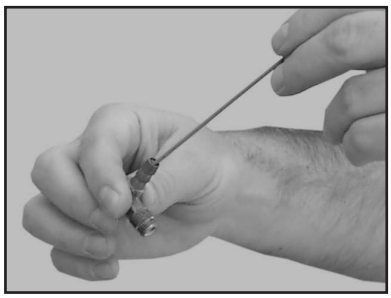


(H)
Remove the Pump Casing and check for restriction; check Impeller damage

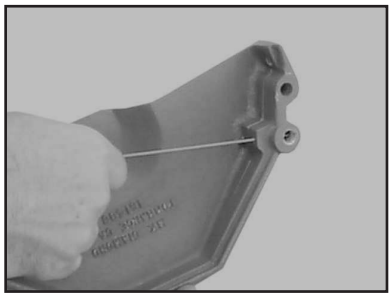


(I)
Remove the Blade Guard Intake Fitting

NOTE: "Rodding" cooling channels is performed by inserting a small wire rod through the cooling inlet on top of the Blade Guard and directing the rod out through each of the cooling flow tubes located on the underside of the Blade Guard. The cooling channels should be "rodded" until all ports are free of foreign debris.



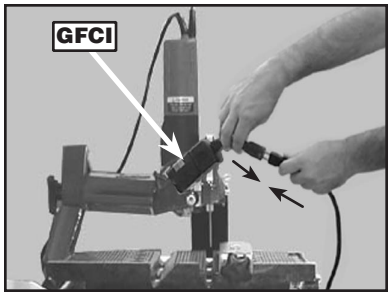
(J)
Clean the Blade Guard Intake Fitting



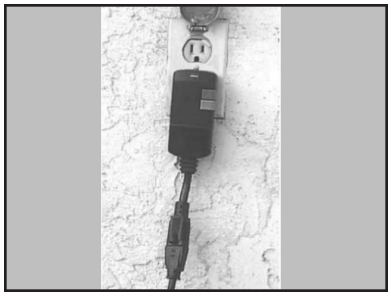
(K)
Rod Cooling Channels and recheck flow

(L)
Return to MK Diamond for Repair

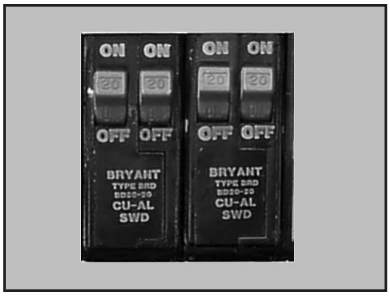
4. Blade Stops Turning



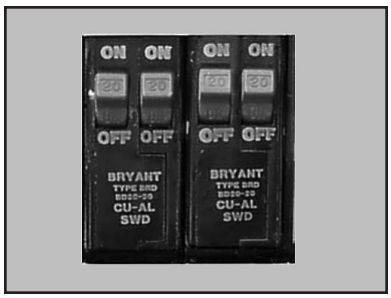
(A)
Verify all plugs are fully installed



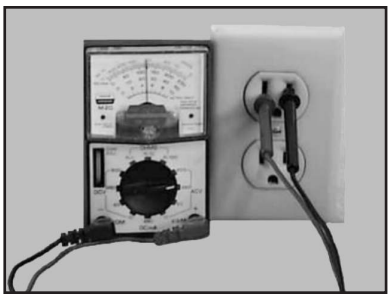
(B)
Check to see if the Ground Fault Circuit Interrupter (GFCI) is tripped



(C)
Verify circuit breaker at least 20 amps – if not, move to 20-amp circuit

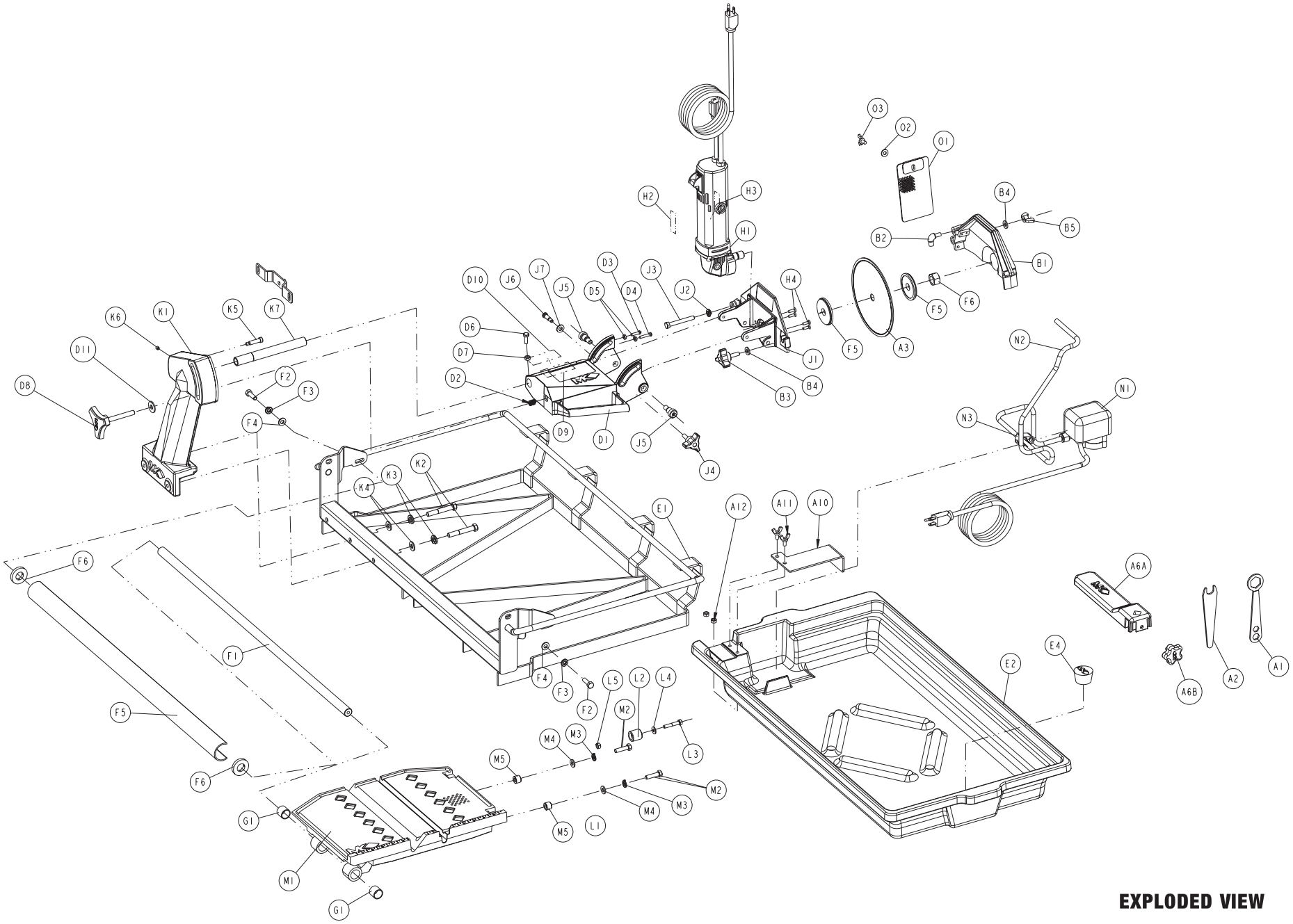


(D)
Verify circuit breaker not tripped If tripped, reset once



(E)
Check power source voltage is 115V – if not 115v, move to another circuit

(L)
Return to MK Diamond for Repair



EXPLODED VIEW

PARTS LIST:

Item	Description	Qty	Part #
A	**Accessories**	1	n/a
A1	Wrench, Blade Nut, 15/16 Boxed End	1	134684
A2	Wrench, Blade Shaft, 11/16 Open End	1	153450
A3	Blade, 7 x 5/8 x .060	1	153441
A4	Owner's Manual, 770EXP	1	160434
A5	Warranty Card	1	155037
A6	Assembly, Large Die Cast Rip Guide	1	n/a
	A6A) Rip Guide (comp)	1	159751
	Rip Guide (raw)	1	159751-RW
	A6B) Knob, Rubber (1/4-20x3/4)	1	159428-1
A7	Carton, Accessory Pack	1	153366
A8	Sell Sheet, Tile Accessory	1	156915
A9	Clip, Table Lock, 50 deg	1	160331-3
A10	Clamp, Holding, Pump	1	162073
A11	Screw, Wing, 1/4-20x1/2	2	151888
A12	Nut, Hex, 1/4-20	2	151893
	Table, Side (comp) - optional	1	160488
	Table, Side (raw)	1	160485
	Screw, Set, 10-32x3/8 - optional	2	160769
B	**Assembly, Blade Guard, 7"**	1	154811-MK
B1	Guard, 7" Blade (comp)	1	154811
	Guard, 7" Blade (raw)	1	154810
B2	Elbow, 1/8 MNPT X 1/4 BARB 90° Brass	1	154652
B3	Knob, Davies	1	151681
B4	Washer, 5/16 SAE Flat	2	151754
B5	Wing nut, 5/16-18 Nylock	1	151746
C	**Carton, MK-770 EXP**	1	160433
C1	Carton, Outer (PCA# 3490003530)	1	160433-01
C2	Insert, Table Support (PCA# 3490003538)	1	160433-02
C3	Pad, Corner, Outer Carton (PCA# 3490003540	4	160433-03
C4	Insert, Outer Carton (PCA# 3490003531)	1	160433-04
C5	Insert, Accessory Pack (PCA# 3490003236, rev.A)	1	160044-03
C6	Divider, Cutting Head Carton (PCA# 3490003237, rev.A)	2	160044-01
C7	Carton, Cutting Head (PCA# 3490003234)	1	160044-05
C8	Divider, Cutting Head Carton (PCA# 3490003238, rev. A)	2	160044-02
C9	Pad, Carton, Cutting Head (PCA# 3490003355)	4	160044-08
D	**Assembly, Cutting Head**	1	160042
D1	Cutting Head (Comp)	1	159937
	Cutting Head (Raw)	1	159936
D2	Helicoil, 3/8-16x3/8	1	153486
D3	Screw, Slotted Pan Head, 10-32x3/4	1	151750
D4	Screw, Slotted Pan Head, 10-32x1	1	151751
D5	Nut, Hex 10-32	2	151749
D6	Screw, Hex Head, 1/4-20x3/4	1	152370
D7	Nut, Hex, 1/4-20	1	151893
D8	Knob, Tri Plastic	1	156770-04
D9	Label, Warning, Read Owner's Manual	1	155806
D10	Tag, Serial Number, Blank	1	157500
D11	Washer, Flat, 3/8	1	101360
D12	Drive Screw, Round Head, #7 x 5/16	2	157849
E	**Frame**	1	n/a
E1	Frame	1	153003
E2	Pan, Water	1	160121
E3	Clip, Cord, 1/4 Push Mount	2	157259
E4	Plug, Water Drain	1	159529
E5	Strap, 9" Drain Plug	1	159530

MK-770 EXP PARTS LIST (cont...)

F	**Assembly, Guide Bar, 3/4 Dia**	1	n/a
F1	Bar, Guide, 3/4 Dia	1	134759
	Steel, C1045 Chromerod, 3/4 Dia x 2.25'	1	154185
F2	Screw, 5/16-18 X 1 Hex Head Cap	2	151743
F3	Washer, 5/16 Split Lock	2	151747
F4	Washer, 5/16 SAE Flat	2	151754
F5	Cover, Guide Bar	1	158403
F6	Spacer, Cover, Guide Bar	2	152393
G	**Linear Bearing, 3/4 Dia**	1	n/a
G1	Bearing, Multi lube	2	152227
H	**Assembly, 120v Motor**	1	n/a
H1	Motor, 120v 7.4A, Ryobi	1	156428-R
H2	Label, Caution, GFCI, 1 X 2 1/8	1	155678
H3	Label, Caution, Receptacle, 1 X 2 1/8	1	154822
H4	Screw, 10-32 X 5/8 Flat Head Phillips Cap	4	157554
H5	Flange, Blade	2	135830
H6	Nut, 5/8-18	1	135848
J	**Assembly, Motor Mount**	1	160052
J1	Motor Mount (Comp)	1	159941
	Motor Mount (Raw)	1	159940
J2	Washer, 5/16 Split Lock	1	151747
J3	Screw, 5/16-18 x 2-1/2 Hex Head Cap, Full Thread	1	151748
J4	Knob, Davies	1	151681
J5	Bolt, Shoulder, Soc Head, 1/2 x 1/2	2	151753
J6	Bolt, Shoulder, Soc Head, 5/16 x 5/8	1	152137
J7	Washer, 5/16 SAE Flat	1	151754
K	**Post**	1	n/a
K1	Post (Comp)	1	160199
	Post (Raw)	1	160198
K2	Screw, Hex Head, 3/8-16x2"	2	153485
K3	Washer, Lock, 3/8	2	150925
K4	Washer, Flat SAE, 3/8	2	150923
K5	Screw, Shoulder, Soc Head, 5/16x1	1	160045
K6	Screw, Soc Head Set, 1/4-20x1/4	1	157528
K7	Pin, Pivot	1	160271
L	**Assembly, Roller Wheel**	1	151756
L1	Bracket, Roller Wheel	1	154021
L2	Wheel, Roller	1	151799
L3	Screw, ¼-20 X 1 ¼ Hex Head Cap	1	157145
L4	Washer, ¼ SAE Flat	1	151915
L5	Nut, ¼-20 Hex	1	151893
M	**Table**		n/a
M1	Table (Comp)	1	160268
	Table (Raw)	1	159938
M2	Screw, 5/16-18 X 1 Hex Head Cap	2	151743
M3	Washer, 5/16 Split Lock	2	151747
M4	Washer, 5/16 SAE Flat	2	151754
M5	Spacer, 1/2x5/16x3/8	2	160264
N	**Assembly, 120v Water Pump**	1	n/a
N1	Pump, Water, 120v	1	151271
N2	Hose, Vinyl, ¼ ID x 2'	1	132951
N3	Clamp, Flow, ¼-1/2	1	154394
O	**Assembly, Splash Curtain**	1	155901-MK
O1	Guard, Splash	1	160310
O2	Washer, ¼ SAE Flat	1	151915
O3	Wing screw, ¼-20 X ½	1	151888

THEORY OF DIAMOND BLADES

Diamond blades do not really cut; they grind the material through friction. Diamond crystals, often visible at the leading edge and sides of the rim/segment, remove material by scratching out particles of hard, dense materials, or by knocking out larger particles of loosely bonded abrasive material.

This process eventually cracks or fractures the diamond particle, breaking it down into smaller pieces. As a result, a diamond blade for cutting soft, abrasive material must have a hard metal matrix composition to resist this erosion long enough for the exposed diamonds to be properly utilized.

Conversely, a blade for cutting a hard, non-abrasive material must have a soft bond to ensure that it will erode and expose the diamonds embedded in the matrix. These simple principles are the foundation of “controlled bond erosion”.

Types of Cutting

There are two basic types of cutting-Dry or Wet. The choice of which type of blade to use depends on:

- The requirements of the job
- The machine/tool utilizing the diamond blade
- The preference of the operator

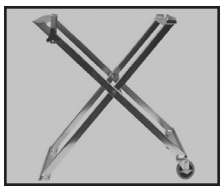
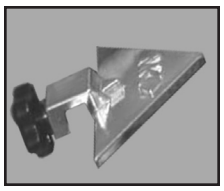
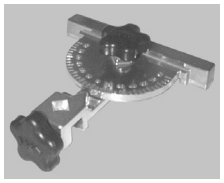
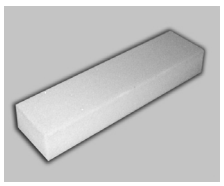
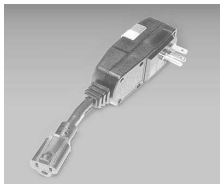
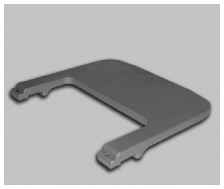
In the case of DRY cutting, the overwhelming popularity and quantity of hand-held saws and the flexible nature of MK Diamond blades to professionally handle most ceramic, masonry, stone and concrete materials, make the DRY cutting blade a very attractive tool. When using a DRY blade, the user must be aware of distinct operating practices to ensure optimum performance. DRY cutting blades require sufficient airflow about the blade to prevent overheating of the steel core. This is best accomplished by shallow, intermittent cuts of the material with periods of “free-spinning” (for several seconds) between each cut, to maximize the cooling process.

For WET cutting applications, MK has the exact blade to compliment both the material to be cut and the wet cutting machine to be used. During cutting operations, liberal amounts of water act as a coolant to support the cutting effectiveness and longevity of the WET blade. Additionally, using water adds to the overall safety of cutting operations by keeping the dust signature down.

Know All You Can About the Material You Wish to Cut

ACCESSORIES

ACCESSORIES

ITEM	NUMBER	DESCRIPTION	
1.	139295	MK-200, 7 x 5/8 Arbor	
2.	139311	MK-215, 7 x 5/8 Arbor	
3.	153293	MK-315, 7 x 5/8 Arbor	
4.	160197	Stand	
5.	134577-MK	Dual 45° Flat Angle Guide	
6.	134569-MK	90° Protractor	
8.	152792	Dressing Stone	
9.	152610	Ground Fault Circuit Interrupter	
10.	160488	Side Table	

ORDERING INFORMATION

You may order MK Diamond products through your local MK Diamond distributor or, you may order direct from MK Diamond.

NOTE: There is a $25.00 minimum order when ordering direct from MK Diamond. All purchases must be made using VISA, MasterCard or American Express.

When ordering direct from MK Diamond, please have the following information ready before calling:

- The Model Number of the saw
- The Serial Number of the saw
- Where the saw was purchased and when
- The Part Number for the part(s) being ordered
- The Part Description for the part(s) being ordered

All parts may be ordered by calling toll free to – 800 421-5830 or 310 539-5221 and asking for Customer Service. For technical questions, call – 800 474-5594.

RETURN MATERIALS POLICY

To expedite the service relative to the return of a product purchased through MK Diamond, please observe the following:

NOTE: When returning all items, they must have been purchased within the previous twelve (12) months.

- Have the Model Number of the saw
- Have the Serial Number of the saw
- Have the location of where the saw was purchased
- Have the date when the saw was purchased
- Contact Customer Service for approval to return the item(s)
- Obtain a Returned Goods Number (RGA) authorizing the return
- Follow the packaging instructions in the following section
- Ensure your item(s) are prepaid to the destination

For returned items, call toll free to – 800 421-5830 or 310 539-5221 and ask for Customer Service. For technical questions, call – 800 474-5594 or 310 257-2845.

PACKAGING INSTRUCTIONS

- Remove the Blade guard and Support Angle Assembly
- Dry the saw before shipping
- When packing, include the following: MK-770 EXP, Diamond Blade, Blade guard and Support Angle Assembly and Adjustable Cutting Guide (Other Accessories are not required)
- Package the unit in its original container or one of comparable size (do not ship the unit partially exposed)
- Ensure all parts are secured in the packaging to prevent moving

AUTHORIZED SERVICE CENTERS

For quicker repair time, you may contact MK Diamond Customer Service, toll free, at 800 421-5830 or 310 539-5221 for the Authorized Service Center closest too you, or visit our web site at www.mkdiamond.com.
For technical questions, call – 800 474-5594.

MK-770 EXP TILE SAW

OWNERS MANUAL & OPERATING INSTRUCTIONS

DOCUMENT NO. 160434

REVISION 201

11/12/08

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